

Turf loss during the summer caused by the overlap of a preemerge crabgrass herbicide applied during the spring.

Tell them the story in clear, concise terms. People tend to be understanding if they know the facts. After all, no matter how good a job a golf course superintendent does, he cannot control the weather. Without a doubt, weather extremes remain the number one stress factor on golf courses today.

When the Weather Breaks . . .

When the period of stress is over, assess the condition of your golf course. Count your losses and analyze what you think caused the problems your course experienced. After all, there is nothing like a prolonged period of stress to bring out whatever strengths and weaknesses exist on the course. You may determine the greens need more and deeper aeration, that a better irrigation system needs to be installed, or that trees need to be removed from around pocketed greens.

Also, use the experience in a positive way to determine which practices need to be altered and which programs should be implemented to better manage turf when it is under stress. Rest assured, summer heat, with its associated stress-related problems, will occur again.

How to Make the Right Connections

by JAMES FRANCIS MOORE

Director, Mid-Continent Region, USGA Green Section

ND YOU THOUGHT THAT the acronym "TGIF" stood for "Thank Goodness It's Friday."

In the world of turf, TGIF also stands for the USGA Turfgrass Information File, which is maintained and compiled by the Turfgrass Information Center, at the Michigan State University Library. Like doctors, lawyers, and other professionals, we now have access to a vast database devoted to turfgrass without ever having to leave our offices.

The TGIF is the largest and most comprehensive database in the world dedicated solely to turfgrass. It may well be the most valuable new tool ever made available to turf professionals since the introduction of the aerifier. It is effective, inexpensive, and available now. But as you might have guessed, there is one little catch. You are finally

going to have to learn how to use a personal computer.

For those who still have nightmares about the day your child came home with something called the new math—relax. Using a computer to access (computer jargon for "gain access to and use") the TGIF is really quite simple. All you need is a computer, a modem, and the proper software.

There are so many different computers with such a wide range of features that acquiring one will probably be your most difficult job. They range in price from \$700 to \$7,000 and beyond, depending on the power, speed, and capability of the machine.

For TGIF purposes, all that is required is that your machine be able to run software programs that run on the IBM

PC. It must have a minimum of 256K of RAM (random access memory). A color or monochrome monitor can be used. However, if you have the option, purchase a system with a color monitor and graphics ability, since you will find the system better suited for other golf course record keeping applications as well.

Your computer can be equipped with two floppy disk drives or one floppy and one hard disk. Again, if you have the option, buy a machine with a hard disk. You will soon appreciate the additional speed and ease of use that this accessory provides.

For those of you who need a starting point in your search for a computer, take a look at the following sample system. As of this writing you can purchase a clone, or IBM-compatible machine, equipped with color monitor, graphics ability, 640K RAM, and a 20-megabyte hard disk for around \$2,500. Add a printer and you should still be able to come in under \$3,000 for your system.

A modem is nothing more than an electronic device that allows your computer to communicate by telephone with the computer that contains the Turfgrass Information File in the Michigan State University Library. Without getting too technical, modem means modulator/demodulator. The modem takes signals from the computer and converts them into a form that can be sent across the telephone lines. A modem at the MSU Library receives these signals and converts them back into a form the computer there can understand.

Modems come in two basic forms internal and external. An internal modem slips into a slot provided inside the computer and is powered by the computer itself. Predictably, the external modem sits on the desk outside the machine and receives its power from the wall outlet. There are advantages and disadvantages to both. Although slightly more expensive, I personally like the external modem. Most external modems provide indicator lights that tell you the status of your call. External modems also have an on/off switch, which makes it easy to reset the modem or turn it off altogether.

The modem you purchase must meet several basic standards in order to use the TGIF. The modem must be compatible to the Hayes modem, which is recognized as an industry standard. Hayes-compatible modems are usually advertised as such. The speed at which a modem sends and receives data is the baud rate. The modem you purchase must be capable of operating at a rate of at least 1,200 baud. If possible, acquire a modem that can operate at both 2,400 and 1,200 baud, since the modem at MSU will also have this ability in the future. When sending or receiving data from TGIF, or any other database, you will quickly learn to appreciate the significantly faster operation of the 2,400-baud modem.

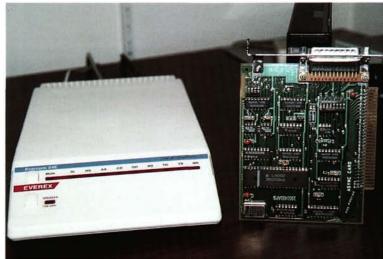
Much like computers, the price of modems varies widely, depending on the equipment chosen. For an external modem, expect to spend from \$200 to \$400. An internal modem will likely

(Below left) A typical computer system as found in many golf course superintendents' offices. (Below right) The software necessary to connect to the Turfgrass Information File can be run from a floppy drive or a hard disk. This unit contains both.

(Bottom right) Modems can be either internal or external. The internal modem, on the right, fits into one of the computer's expansion slots inside the machine. The external modem, on the left, sits next to the computer, and usually has indicator lights for easier monitoring.







range from \$100 to \$300. Be careful, though. Some of the bargain-basement-brand modems are not completely compatible to the Hayes standard.

The computer and modem (the hardware) cannot get you into the TGIF by themselves. You must also have the program or software that makes the modem dial and connect to the computer at MSU, and allows you to search and download information from the turfgrass file. The program that accomplishes all this is called Vueport. Vueport was written specifically for the Turfgrass Information File, and is the only communications program that will perform properly when using the TGIF. It can be run from a floppy disk or hard disk,

and is extremely easy to install on your machine.

Conclusion

As you can see, for a relatively small investment in hardware and software, the golf course superintendent can literally put this extremely powerful tool at his fingertips. Using the TGIF, his management decisions can be based on research and agronomic fact. In addition, a rapidly growing number of superintendents are using personal computers to help them schedule preventive maintenance of equipment, prepare and monitor budgets, and more accurately monitor their pesticide programs. Your club will find this new tool will pay for itself in a very short period of time.

The fee schedule for using the TGIF has not been determined, but it will be available shortly. It will be a nominal and reasonable charge, especially considering the size, power, and flexibility of the database. For additional information about the USGA Turfgrass Information File, contact one of the following:

- 1. Your regional USGA Green Section Agronomist (see the list on the inside cover of the GREEN SECTION RECORD).
- 2. The Turfgrass Information Center at Michigan State University: Phone (517) 353-7209.
- 3. The United States Golf Association, in Far Hills, New Jersey: Phone (201) 234-2300.

Impressions of a Summer's Tour with the Green Section

by SHERWOOD A. MOORE

ORK for the Green Section? What if I can't answer people's questions? How about the planes to catch, the miles to drive, and the reports to write, and what about finding all those golf courses and hotels? Can an old dog teach new tricks? Why would they want me?

These were just a few of my thoughts and apprehensions when I was approached by the USGA Green Section and asked if I would be interested in assisting them by calling on golf courses in 1987 as part of their Turf Advisory Service. After giving it some thought, though, I felt that my more than 50 years of experience in golf course management, along with having been the

superintendent at three U.S. Open Championships, would be of value to somebody along the way. It would also be an exciting challenge and a great way to climax my career.

So began a four-month adventure that took me to 60 golf courses in Massachusetts, New York, Pennsylvania, Ohio, Nevada, Utah, and California. I must admit that I approached every club nervously, wondering if I would be accepted as a representative of the Green Section. These apprehensions were quickly put to rest, however, as soon as I met with the superintendent and officials at each club, and we began to share our experiences in turfgrass management.

My respect for golf course superintendents and the job they do was reaffirmed from the beginning. From Massachusetts to California, regardless of their ages or the budgets they worked with, the superintendents with whom I visited were eager to learn, enthusiastic about their work, and knowledgeable. The same could be said about many of the superintendents in my generation, but it was apparent from my travels that today's superintendents are taking good advantage of the many educational opportunities in turfgrass science and golf course management that weren't available when I was starting in the business. It was very gratifying to see how they're putting their knowledge to work, and how they've grown in stature at their clubs and in the game.

Golf itself appeared to be in good shape, based upon my observations. Many private clubs had full memberships and long waiting lists, and play was up at both private and public facilities. Correspondingly, the good financial health of the clubs was reflected in the steadily increasing budgets for the maintenance and upgrading of their golf courses. Despite this rosy appearance, though, I saw considerable rebuilding and remodeling of the clubhouse facilities at some clubs at the expense of much-needed golf course renovation work. I'll admit to a bias on the subject. but how can the board of directors at any club neglect golf course drainage, irrigation, and equipment in favor of mauve carpeting and designer lockers? Needless to say, in every such case I encountered, the urgent need to follow through with critical programs and

Sherwood A. Moore was superintendent at Winged Foot Golf Club during three U.S. Open Championships, in 1959, 1974, and 1984. He is a past President of the Golf Course Superintendents Association of America. In 1987, he received the USGA Green Section Award for distinguished service to golf through work with turfgrass.