TURFCOMMS V. 4, I - 6 (AUG. 13, 188

PURPOSE: To pass on what we learn willingly and happily to others in the profession so as to improve turf conditions around the country.

> FUNGICIDE KILLS TURF - There are at least a few horror stories about death of cool season grasses sprayed with fungicides this July. In fact Gordon's is recalling their SP formulation. Gordon's SP formulation may contain a herbicide. If you have any call them - don't use it. Gordon Corporation, 1217 West 12th Street, P.O. Box 4090, Kansas City, MD 64101, (816) 421-4070.

Beware when using flowable Daconil 2787 in hot weather <u>Poa</u> <u>annua</u> and to some extent bentgrass can be burned.

VERTI-DRAIN SOME MORE - The last issue of Turfcomms generated a response on this machine worthy of note. This owner and commercial renter of the machine claims the reason they do not use the one inch hollow times is that most golf courses are not set up to handle all the soil brought to the surface.

This struck me as probably being quite true in that 3/4 inch tines on two inch centers to a three inch depth has the possibility of bringing up a cubic yard of soil per thousand square feet.

The calculations on one inch tines on four inch centers to a depth of 16 inches is a possible 25 cu. yds. of soil per green.

CALCULATIONS - at 25 cubic inches brought to the surface per time times 9 holes per sq. ft. = 225 cu. inches/ sq. ft. OR 0.13

TURFCOMMS is published at unpredictable intervals by the editor and publisher:

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cubic ft. of soil per sq. ft. of surface OR times 1000 = 130 cu. ft./1000 sq. ft. OR 4.8 cubic yards per 1000 sq. ft. of putting surface OR about 25 to 30 cu. yds. per green.

Imagine hauling all that soil away and then having to replace it all with sand to fill the holes back up? It is probably true that each time would not deposit on the surface a full 25 cubic inches, and you may not want to go down to a 16 inch depth. As a matter of fact after reading the above you may not want to use hollow times at all.

Regardless of solid or hollow times the above calculations should serve as a guide for the amount of sand needed to fill the holes. Filling the holes with a suitable sand is the only way of assuring that they will stay open to allow air and water movement. And after paying all that money to have this special job done let us do it right.

PROGRASS<sup>TM</sup> GIVES POA ANNUA FREE BENTGRASS - There was a lot happening in the Omaha area this last winter. The results of it all was interesting. Earlier in Turfcomms (V.4, I.4) I reported on the problems one superintendent had trying to convert old Kentucky bluegrass fairways (much Poa annua) to solid perennial ryegrass. At that course under his conditions the stand was troubled by the Prograss, dry weather and an irrigation system unable to function in cold winter weather. In spite of all the problems his fairways were reasonably free as of mid-July.

Across town a very different story was unfolding with a similar attempt. Similar but definitely not the same. The superintendent across town had decided to go to creeping bentgrass fairways. He started with very similar fairways last August - Kentucky bluegrass in name, but lots of Poa, some rye and some bentgrass. His approach was to spray fairways with Roundup after a golf course architect decided where the edges of the fairways should be. A good idea when going to bentgrass. The fairway edges although not permanent are not going to be easy to alter.

The Roundup was applied at 3.4 quarts per acre starting August 10th. Chicago area superintendents had told him that such rates were necessary to insure complete kill of perennial ryegrass. August 18 he cut a diamond pattern down into the soil with a Jacobsen 548 seeder.

He followed this by broadcast seeding one pound of Penncross and a half pound of Pennstar per 1000 sq. ft. He then made three passes with a fairway aerifier and did the outside perimeter eight feet of each fairway with a Toro greens aerifier. The fairways were then dragged to work the seed into the groves and

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aerifier holes. With all the soil from the aerification there should have been good soil contact everywhere.

Irrigation was turned on and the seed germinated. On September 21st a starter fertilizer was applied at a rate to give 0.78 lb. of N/M. This was followed on October 10th with 1.08 lb. N/M from a high nitrogen fertilizer with low P and moderate K.

Prograss<sup>TM</sup> was applied for Poa annua control at 1/2 lb. a.i./A on October 14th and again on November 3. The second application was at 3/4 lb. a.i./A.

The results, as I saw it this May, was just amazing. The stand of creeping bentgrass appeared to have covered 98% of the fairway surface. The edges were the weak spot. The percentage Poa annua present, as judged when Poa was in flower, was one percent or less.

"WONDER GRASS" - If you were one of the many that read USA TODAY July 11, you learned that Dr. Busey, Univ. of Florida researcher, has a "kin to the St. Augustine variety" that would need watering only four times a year for a lush lawn even during dry spells. This hybrid "repels insects", "resists disease" and "draws groundwater with extra-long roots - to save on water now wasted by sprinklers."

Suspecting that for most of us and most of the U.S. of A. this grass is not adapted I called Dr. Busey. He was not in but returned my call the next day. He explained that the original article with nothing about WONDER GRASS in it was released only for local consumption to a large Miami newspaper. They gave it front page space. It was then picked up by USA TODAY and many other newspapers. Dr. Busey has been on the phone and in press conferences much of the last three weeks.

The "Wonder Grass" title was dreamed up by USA TODAY. The grass cultivar Busey is about to release is a St. Augustine and will probably be useful for Florida and some of the Gulf Coast. But, turf researchers are concentrating on developing grasses with similar abilities for your area at most if not all the state and commercial testing facilities around the country. So don't give up hope.

ANNOUNCEMENTS - The editor's daughter Lori became Mrs. Richard Mogensen at the end of June. Daughter Sharon, not to be out done, gave birth to Peter Eric Lyman three days latter.

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## TURF TECH

## A COLLECTION OF OPINIONS ON COMPUTERS, SOFTWARE, AND APPLICATIONS FOR THE TURE INDUSTRY By

Jonathon L. Scott, CGCS

With the tremendous variety of computers available today, the task of selecting one that best meets your needs without breaking the budget seems, at best, impossible. Yet, it is this very variety that will save you money, if you know what to look for. Last newsletter I wrote of the basic components necessary for putting together a computer system that will serve you well in most situations. The heart of this system is, of course, the computer itself. It's sort of like the amplifier in a stereo system. The speakers, turntables, tape players, etc., are all useless without the amplifier, and even though they may be of high quality, their output is no better than the quality of the amplifier. So it goes with a computer system. Buy a cheap central processor, or computer, and all the fancy disk drives, monitors, modems, and printers will only work as good or as fast as the CPU (Central Processing Unit).

You probably have heard the new computers advertised in terms of "clock speed" or just plain "speed". These terms describe the relative ability of the computer's CPU to process information from the various inputs including programs, data, keyboard, monitors, and printers. Clock speed is measured in megahertz or Mhz, and for comparison, the old IBM-FC's and their clones operate at 5-6 mhz. Now, believe me, compared to my old Apple IIe running Appledos 2.0, this is lightning! So, what is the meaning of speed? Well, to put it simply, speed is the amount of patience you are willing to exercise while waiting for the computer to do something you want. If you are working with large spreadsheets or very large data bases, you better have something else to do while the computer at 6 mhz does it's work. On the other hand, if all you are doing is telecommunication and small (by big business standards) budget spreadsheets, a PC type with an 8086 processor will do just fine. What is the advantage of this? Cost will be higher for more speed, lower for less. An 8086 machine can be had for under \$1,000, complete. A comparably equipped 8286 processor operating at 8-12 mhz will cost over \$2,000. A lightning-fast 8386 processor running at 16-20+ mhz will cost \$3,500 to \$5,000 for just a basic system. With this kind of a spread, you better know what your needs are when buying a CFU. A certain amount of patience will buy you a lot of accessories.