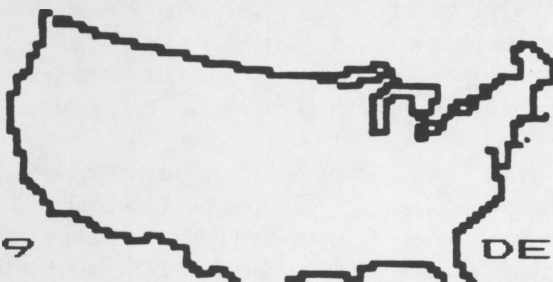


TURFCOMMS



V. 4, I. 9

DEC. 3, '88

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

USGA - Did you read what their rates are for a Turf Advisory Service Visit in 1989? "If paid after July 15.....750" for a half day. You can save a \$100 by paying before April 15.

MY rates in 1989 are \$450 if paid by April 15. After the 15th of April the rate goes to \$500 for a half day. I'll beat their rate for full day visits by several \$100.

I am also offering group rates if you can get another two or more golf courses in your immediate area to take a visit. Call or write for more details on the group rate offer.

AN ENDORSEMENT - On the recently announced slate of candidates for the Golf Course Superintendents Association of America's board of directors as submitted by the Nominating Committee is listed a Gary Grigg. Gary Grigg, CGCS, superintendent of Shadow Glen Golf Club, Olathe, Kansas would in my estimation make a very fine director. The GCSAA would be fortunate in future years to have Mr. Grigg as its President.

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

Douglas T. Hawes, Ph D
Certified Professional Agronomist
Specializing in Golf Course
Maintenance Consulting

2408 Roundrock Trail
Plano, Texas 75075
(214) 867-0176

Subscription cost is \$15. Send Checks to Doug Hawes at the above address.

I have been following Gary's career for over 10 years. As a consultant for the USGA I visited two of the courses he was in charge of and a third he had just left. When I learned of his move to Kansas I made a point of visiting him. My goal was to learn something - I did; see the article by Gary in this issue.

Gary is not, nor has he been a customer of mine since I went private. Sure wish he was; I know I would learn at least one helpful hint for each one I was able to pass on to him. We all can profit from his experience and 110% effort if you'll elect him director.

TGR - Jim Moore, USGA agronomist, feels from what he has seen over the last three years that TGR can be used to successfully remove *Poa annua* from bentgrass. He stressed that you must be favoring bentgrass in your total program with low nitrogen and water. Most importantly when the *Poa* starts showing all sorts of disease symptoms after the TGR application you must NOT run out and save it with fungicide sprays.

In other words TGR by itself does not get rid of *Poa*; you must be willing to help it die and favor the healthy bentgrass. This was the gist of Mr. Moore's remarks on TGR made at the North Texas G.C.S.A. meeting in November. This agrees with what I have seen and learned.

WHO'S YOUR ATTORNEY - Mr. Moore also reported that a superintendent who redesigned and constructed a tee on one golf course was being sued for an unsafe design. A golfer hit on another hole claimed the redesigned tee was not aligned properly.

VERTIDRAIN - On the Vertidrain he claimed some courses were so impressed with the improvement on old greens that they had canceled plans to rebuild. Jim felt that yearly deep tine aerification would be needed to keep these old greens in good condition.

BERMUDAGRASS ENCROACHMENT - On bentgrass greens he has not seen much success stopping bermudagrass encroachment under the long hot summer conditions found in Dallas. Neither Acclaim or Prograss seems to be giving control. However, further north where bermudagrass has less of an edge over the bentgrass these materials appear to give the bentgrass a chance when applied to bermudagrass in the fall.

Mr. Moore has come to the conclusion that 328 or dwarf bermudagrass collars are best around bentgrass greens in North Texas. Easier to maintain than bentgrass collars and can control encroachment of these two cultivars with Tupersan (siduron). Right on Jim.

CART USE - On cart use, he is seeing more acceptance of the 90° rule. However, he warns that using it all the time without a wall to wall cart path may result in a dirt path down the side of the fairway.

ARTICLE OF THE YEAR - This honor I have decided to bestow on Dick Nugent, golf course architect, for his article/outline in the Conference Proceedings of the 59th Int. G. C. & Show, 2/88 Houston. The title was DESIGN VERSUS MAINTENANCE -- WHICH COMES FIRST?

Mr. Nugent did an excellent job of presenting the many facets to this continuing controversy. Detailing goals of the owner, player, superintendent, and architect. I'm not sure that he said anything new but, he did present all sides in an unbiased and interesting manner.

For example of his unbiased presentation I quote:

"What does the architect want?

- More acreage.
 - More money.
 - The license to do whatever 'off the wall' creative idea occurs to him.
 - The authority of God."
-

JONATHON SCOTT - Our computer columnist, Jonathon Scott, has become an agronomic consultant for Golf Turf, Inc. This is the agronomic branch of Jack Nicklaus Golf Services. He replaces Allan McCurrach who went back to the PGA.

LIGHT WEIGHT FAIRWAY MOWERS - It may be resolved by superintendents and researchers that triplex or lighter weight mowing is the best way to produce the quality of fairways demanded by our golfers when growing cool season grasses. But, those same superintendents have not agreed in anyway what is the best triplex or five gang mower to mow fairways with.

Most would rule out the five gangs because only Toro's 450 D has been out long enough. The 450 D will do an excellent job. It has only two weaknesses in my estimation - price and weight. Both too heavy. However, it is well worth considering.

One superintendent I visited was using two Ransome 180s, a Toro 84 and a Toro 216. With his few months experience with all three he felt the Toro 84 has the best traction and is used on his steep sloping fairways. The Ransome 180 he feels has the best cutting head, while the Toro 216 is a compromise between the best assets of the first two. TO CONTINUE NEXT ISSUE

**CONCRETE CART PATHS
"A BETTER WAY"**

By Gary T. Grigg, CGCS

Shadow Glen Golf Club is a new 18 hole private club built as part of Cedar Creek development, located in Johnson County, Kansas. It is a unique 3,300-acre development nestled in a heavily wooded terrain with rocky bluffs, a man-made lake, and several small creeks. The championship golf course was designed by the team of Jay Morrish, Tom Weiskopf, and Tom Watson.

The entire development is owned by the Ash Grove Cement Company. Founded in 1882, the company is noted for its quality and service. A long-time leader in the cement manufacturing industry, Ash Grove Cement Company operates quality portland and masonry cement plants across the United States.

As a long-time superintendent of newly constructed golf courses, I have seen a lot of problems with golf cart paths, both asphalt and cement. I had never been convinced that I had ever seen cart paths done absolutely correct.

Because Ash Grove is a cement company, there was not much discussion about what kind of material we would use for our paths. Due to their concern about quality, however, we wanted to do it right.

Ash Grove has supported a progressive research program for more than 50 years. The company's 36,000 square foot, all concrete building in Kansas City completed in 1967 is one of the finest equipped privately-owned laboratories of its kind in the nation. The Research and Engineering Department is staffed with experienced technical personnel.

After several meetings about golf car use, maintenance equipment use, the climatic conditions, and our soil structure, I was given the following set of specifications.

- * make sure after grading in the cart paths 10" deep that the soil was compacted
- * 4" of compacted limestone base
- * 6" of 4,000 P.S.I. concrete with not less than six sacks of cement per cubic yard of concrete
- * vibrate the concrete in place
- * no reinforcement steel or wire
- * no expansion joints

- * a deep broom finish

- * saw grooves must be at least one quarter the depth of the path every eight feet which in our case was a 1 1/2" cut

- * saw grooves must be made same day as pour, before the concrete can shrink

- * spray all grooves and surface with retarding compound

- * spray all grooves and edges of the path with retarding compound a second time after forms are removed next day

- * we also built 12' pullouts at tees and greens

- * we also formed 6" curbs that were integral with the concrete path at tees and greens for cart control

The reasoning behind these specifications are as follows:

- * using 6" of 4,000 P.S.I. concrete added enough strength to eliminate the steel bar

- * no steel bar meant no place for water entry into the concrete. No pop off of concrete due to rusting and expansion of the steel

- * saw grooves allowed a weak place for the concrete to crack

- * by controlling the cracking, we have no cracks anywhere else

- * by cracking the concrete every eight feet we eliminated the need for expansion joints

- * eliminating the expansion joints meant a smoother ride and no weak corners at the site of the expansion joint, which is always a problem

- * the savings in cost of reinforcement steel and the ability to move faster by sawing later, and not using expansion joints, offset the added cost of the extra strength concrete and the 6" depth

In conclusion, you can add dye if you like or use exposed aggregate if you like but this method of construction will give you the finest path possible.

Our finished cost was \$2.29 per square foot of path and \$3.50 per running foot of 6" curb. That's no more than other approved methods of construction on other jobs.

Ash Grove is very proud of the finished product and I am very proud of our golf course.

TURF TECH
By
Jonathon L. Scott CGCS

Last newsletter, you were left hanging on what to look for in selecting a central processing unit, or CPU. Here are a few more tips to consider before you buy.

Is the keyboard very important? You bet your bytes it is, especially if you forgot typing 101 in your freshman year of Central High. A comfortable keyboard with easy to find keys will be a big help in your learning process. It is hard to concentrate on what you are trying to do if you have to hunt for every key to punch, especially if you are on line to Turfbyte with the meter running. The keyboard should have a solid feeling with the function keys (F keys) located where they won't accidentally be tripped by errant fingers and thumbs. The newer "enhanced" keyboards of IBM fame do this nicely. The old PC type still aggravates me to no end when I hit the "Print Screen" function key in the middle of an on-line transmission and have to wait faithfully and patiently while the printer slowly prints out my screen. You see, IBM in its infinite wisdom placed that key just to the right of the shift key where your little finger can dance all over it. Thank you, IBM, for correcting that little problem by placing the "Print Screen" so far out of reach that even I can't mistakenly hit it. Try out the keyboard before you buy, it may save you some headaches.

Finally, you might want to consider how BIG the CPU is on your desk. You will hear salesmen and advertisers talking of "footprints". No, they are not referring to the mysteries of the Himalayas; they mean the size of the computer base. Most of the modern computers are getting smaller. This means less room inside, but more room on your desk. IBM solved that problem with the PS2-60 and 80 by putting the CPU on the floor, standing on edge. That's fine for a clean, carpeted office, but unless your's is different than mine, the only thing electronic I want on the floor is the vacuum. So, my PS2 sits comfortably beside my file cabinet, still taking up less space than the old PC, and that is progress. A CPU that is the size of a small briefcase is good as long as it has the required expansion slots and accepts full sized cards. Many brands do a good job of this, and you should look carefully at them for your needs. If size is no problem, again you can save some money by not worrying about it.

All of that just for the CPU? I never said computing was dull. It is not as difficult as it may seem however, and most good systems are built around good CPU's. Find a CPU that fits your needs, and the rest of the system will fall into place. But, just in case you wondered, we'll cover disk drives next month.