TURFCOMMS V. 7, I. 3 MAY 1, '93

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

MECHANICAL ROLLERS and HYDROJECT A NEW WAY TO MANAGE GREENS?: A fellow consultant from the Northeast writes "The rage in the Metropolitan (money) areas up here now is the new speedy mechanical greens rollers used to increase the speed of greens (supposedly with less long term injury to turf because they say you don't have to mow as close...and you still can have faster greens). I've seen it in operation and it does speed up greens. Supts. up here are using the mechanical roller and the Hydroject in combination... and they are giving rave reviews... so a lot of them are jumping on the "bandwagon".

The mechanical roller speeds-up the green for a day or two... therefore it follow that the rolling operation will have to be frequent. Will this accumulated effect add to compaction? Certainly, chances are they will!

The combination of the silt & clay brought to the surface as a result of the Hydroject ... if that's what it does (I think that's a certainty also) and the frequent rolling certainly have the potential of a double whammy that could produce serious problems in greens management.

Editor: I have yet to see a problem but, will admit I haven't looked as closely as I perhaps should have. Are we getting silt brought to the surface by the Hydroject. I would most expect to find such on those old soil base greens that had been saved by sand topdressing when that maintenance practice became vogue. HOW CLOSE HAVE YOU LOOKED AT YOUR PUTTING SURFACES???

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For those of you getting ready to jump on the greens-rolling bandwagon, consider Turfline, Inc.'s True-SurfaceTM Greens Rolling System. Rather than put heavy rollers on your old triplex greens mower and thus increase your chances of hydraulic leaks consider this vibratory rolling system. It uses an unbalanced center shaft with an eccentric flyweight to create the smoothing action. For more information call John Humphrey 1-800-433-8506.

As Jeff Nus, GCM's Technical Editor, points out "we been down this road before". Rolling is not new. It has been a tool used at championship sites forever. Dr. Nus feels that with greens now constructed of sand the old problem of soil compaction won't rear its ugly head because the sand-based greens resist compaction. The implication from his article is that this is more a surface smoothing operation.

YES and NO! Soil compaction has always been a surface phenomenon. It is true that sand-base greens do resist compaction but the surface does compact and seal. If gas exchange can not readily take place thru the surface layer the soil below will contain rising levels of carbon dioxide from root and microbial respiration and decreasing levels of oxygen. The volume of soil air may be greater than we had with soil base greens but the problem of poor air circulation won't go away. Water infiltration rates can approach zero on a rolled green that has an excellent percolation rate in the mix just below the surface.

Will repeated use of the Hydroject allow us to roll greens regularly? Probably if this machine isn't causing a silt layer to be deposited on the putting surface. On such rolled greens there will be little need for deep penetration with the Hydroject. One to two inches is all that will be needed.

BIODEGRADABLE GOLF TEES: On December 21st of last year I saw a small article in the BioCycle magazine telling about two new biodegradable tees now on the market. Our standard wood tee is definitely biodegradable but it is rather hard and thus rough on mowing equipment and does not biodegrade very rapidly. Seeing that the addresses to both companies marketing these tees, Terra Form Inc. and Kmart, were available I requested free samples. Terra Form Inc. sent me four tees, Kmart sent me 40.

On January 15th one Terra Form tee and three Kmart tees were stuck in the lawn for observations. On the same day I examined more closely the remaining samples. The Terra Form tees looked much like some white plastic tees I had seen in the past. They were hard, shiny and clean looking; essentially the same dimensions as a standard wooden tee. They were more flexible than a wooden tee but not terribly so. When cut with tin snips they appeared to require almost as much effort as cutting a wooden tee.

The Kmart tees on the other hand were dark brown, dull and in one

of the two packages stuck together like they were sticky when put in the package. They are about twice the diameter of a standard wooden tee and very easily bent and broken. When cut with tin snips they appeared to require much less effort than cutting a wooden tee.

The Terra Form tees are molded from starch polymers. The Kmart tee is actually the modified invention of Casey Golden a 14 year-old boy from Colorado. The tees are "made from recycled newspapers, beverage industry by-products and plant fibers." These tees are packaged with a warning that says, Don't leave used tees in the pockets of golf attire while being laundered or in wet weather."

January 17th, two days after being placed in the turf, the Terra Form tee had become very soft and the portion of the tee in the soil had swollen to two or three times its normal size. The top of the tee was still relatively firm. The Kmart tees each had lost the bottom 1/4 to 1/3 and the bottom of the portion remaining was deteriorating "badly". The upper portions were very soft and almost felt sticky. The weather had consisted of one cool cloudy day(high 48) and one reasonably warm sunny day(high 66) both nights had been in the mid-30s, humidity was relatively high. By March 13th you could see some remains of the Kmart tees. They looked like small piles of paper powder. The top of the Terra Form tee was still hard in spite of seven plus inches of rain.

CONCLUSION - If you're trying to encourage the golf professional to give away to the members a softer tee that won't be so hard on your mowing equipment the Terra Form tee is a fair choice, perhaps even a good choice in moist (humid) climates. The Kmart tee is an excellent choice IF your members want to do something for the environment and they don't play golf in rainy weather. The Kmart tee is going to be difficult to sell people on using.

CERTIFICATION OF SUPERINTENDENTS: I was recently asked to write an article on certification for the American Registry of Certified Professionals in Agronomy, Crops, and Soil (ARCPACS). The flavor of the article was to have been on how it had benefited me and how it might benefit others in the turf industry. I think it is very hard to evaluate how certification has assisted oneself. But, certification does show to those that are in the market for the services you offer that you have at least met certain industry standards of training, education and experience. It is still buyer beware.

As certification of golf course superintendents by their own organization becomes more difficult, presently you must "document five years' experience as a golf course superintendent, be currently employed in that capacity, and have completed one year (30 semester credit hours) of college course work or 10.5 CEUs from GCSAA Division I seminars." It may be advantagous for superintendents lacking the education, experience or other criteria spelled out by the GCSSA to consider other alternatives

that will help give them an edge when applying for that job that is going to be a step up. One of those might be Certified Horticulturist under ARCPACS or certification by the Professional Grounds Management Society, (410) 667-1833. All superintendents should be certified (licensed) pesticide applicators.

I don't want to encourage superintendents to take the easy way out but, I do wish to expose you to the alternatives. Obtaining certification and keeping it in most any organization involves a certain amount of effort. Ideally if the certification program is well organized and administrated you gain when you meet their requirements by being better educated in your profession. Most all such programs require that you continue your education by either attending classes, (symposiums, conferences, seminars) or self education by research, journal and text reading or publication of papers, reports and texts in your field.

Becoming a Certified Horticulturist under ARCPACS might be an option for an individual with a degree in horticulture who does not yet have the five years' experience as a golf course superintendent. For more information on this write ARCPACS, 677 South Segoe Rd., Madison, WI 53711, (608) 273-8080.

Texas, North Carolina and other states have their own certification programs. In North Carolina there is one for Golf Course Technician run by the Dept. of Labor and one for Golf Course Worker Training run by the Extension Service. In Texas one may become a Certified Professional Turf Manager with five years full-time experience in professional turfgrass management. Thus an assistant superintendent can become a Certified Professional Turf Manager when he can't qualify for a Certified Golf Course Superintendent title. By doing so he shows those in position to hire him that he is acting in a professional manner and testing himself using industry standards as best he can.

ARE YOU ?

DUCTILE IRON FITTINGS: I know that many of you are already replacing any broken of leaking irrigation system elbows and tees with ductile iron fittings (cast iron). Let me encourage the rest of you to do so. I had run into this trend in the industry several years ago but, after hearing Mr. Michael Harrington, Pres. of The Harrington Corp., talk at the North Texas GCSA monthly meeting I thought I might as well make it known that I to thought this was a great idea. I found that the irrigation systems designer used by GolfScapes was specifing them. Why not you?

The extra cost of ductile iron fittings on a complete golf course system would probably pay for itself in the first year. That assumes that with other type fittings you would have a major fitting blow in the first year. You probably won't, but no guarantees after the third year!