March/April

MD Nutrient Management

There seems to be confusion and numerous rumored requirements regarding nutrient management standards for Maryland golf courses. Starting May 2001, superintendents have been required to keep nutrient application records. The actual guidelines recommended by Dr. Turner and the University of Maryland should be completed sometime this spring. The following information is required for the Maryland Nutrient Management Plan:

 Records must be kept in a form approved by the Department;
Provide commercial fertilizer recommendations prepared for the land and for the plants, documenting that University of Maryland Cooperative Extension recommendations were followed, including;

- a. Soil tests
- b. Production or management objectives
- c. Timing of nutrient application.

For each application of nutrients to the land and to plants, the person shall make and keep for least three (3) years a record that includes:

- The amount of nutrients applied to the land and to the plants
- 2. The location of the nutrient application
- 3. The timing and rate of the application
- The nutrient content of any fertilizer applied to the land and to the plants.
- Should you have any questions, please contact Earle Canter, Marland Department of Agriculture at 410-841-5959.



Putting Green,

continued from page 1

Plant growth regulators

With the high use of plant growth regulators on greens in the past decade, their affects on putting green speed needed to be determined. Research has shown that six to ten days after an application, a six inch increase in speed was measured without changing the mowing practices.7 This management tool has allowed superintendents to reduce the amount of mowing and rolling treatments to greens if they so desire. **Irrigation**

It is often commented that wet greens are slower greens. One study has disputed this claim. This study compared irrigated turf to nonirrigated turf over a ten day period. The turf area did not receive any rainfall during the ten day period. The researchers expected to see gradual speed increases in the nonirrigated turf. However, the nonirrigated turf did not have a speed increase. While the researchers could not explain this lack of speed increase, they did report a severe reduction in turf quality. They concluded that drying out the turf was not a good practice for increasing putting green speed. This was further supported by findings on the irrigated turf area. The irrigated turf area showed speed decreases of only six to eight inches immediately following irrigation. Once this moisture evaporated, (within one hour), the speed returned to prewetting levels.

Nitrogen fertility

Applications of nitrogen will cause a decrease in speed. Speed reductions of twelve inches have been recorded when 0.5 lbs of soluble nitrogen are applied. 4 Spoon feeding of nitrogen, a common practice on golf greens using 0.1 to 0.125 lbs of nitrogen per application, will have less noticeable impacts. However, seasonal nitrogen rates have shown decreases of three inches for every 1 lb. of nitrogen applied.

Topdressing

Topdressing is a practice that most believe will increase speed. The research is conflicting. One study showed a long term increase in speed while a second showed no change. Since topdressing is a practice that has many other benefits to golf turf, affects on speed have not become an issue.

Varieties

Several creeping bentgrass and bermudagrass variety studies have been performed. There have been no significant differences in speed reported between varieties.

Golfers and Putting Green Speed

There was a study performed to see if golfers could determine differences in speed. Researchers have been able to prove that golfers cannot detect speed differences of six inches under any conditions and they cannot detect differences of twelve inches without there being a change in the mowing height.

Final Thoughts

As the golf course superintendent, you have the tools to change putting green speed. Use the stimpmeter wisely and you will have more consistent green speeds. Using the stimpmeter only for speed increases, obtained through very low cutting heights