

Stop 15

Historical & Current Fertilizer Management Practices for Golf Course Greens

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Crop and Soil Sciences, and Botany and Plant Pathology

In 1964 Dr. James Beard of Michigan State University released three suggested fertilization programs for golf course greens. His "Intensive Fertilization" and "Green Fertilization With Activated Sewage Sludge" programs suggested 8.5 lbs. N/1000 sq. ft. annually while his "Low Budget Greens Program" suggested 4.25 lbs. N/1000 sq. ft. annually.

A current trend in green fertilization is to spray 1/10 of a pound of nitrogen every ten days throughout the growing season. If the superintendent initiates applications on April 1 and ends them November 1 a little over 2 lbs. of N/1000 sq. ft. is applied annually. This method of spoon-feeding is a result of golfers demands for faster greens. Other objectives behind spoon-feeding nitrogen include reduction of *Poa annua* encroachment and minimization of scalping that can occur when temperature and moisture conditions cause rank shoot growth.

Some golf course superintendents initiate the 1/10-lb. nitrogen program with a 1 lb. of nitrogen in a starter fertilizer or as a natural organic annually prior to beginning their "spoon-feeding" diet. Another tool the superintendents use is tank mixing plant growth regulator with the nitrogen to enhance green speed, minimize growth flushes, and increase color.

On April 28, 2000 a green fertility study was initiated that combined historical and current fertility practices at the HTRC. Observations include green speed measurements with a Stimp meter, color ratings, and disease counts. The eight fertility treatments in the study are 1) Urea applied every 30 days at the rate of 1 lb. N/1000 sq. ft. 2) Methelyne Urea applied every 30 days at the rate of 1 lb. N/1000 sq. ft. 3) a starter fertilizer applied at the rate of 1 lb. N/1000 sq. ft followed by 1/10 lb N every ten days 4) Milorganite applied at the rate of 1 lb. N/1000 sq. ft followed by 1/10 lb N every ten days 5) 1/10 lb. N/1000 sq. ft. applied every ten days 6) no fertility 7) 1/10 lb. N/1000 sq. ft. applied every ten days with 1/3rd labeled rate of Primo and 8)) Methelyne Urea applied every 30 days at the rate of 1 lb. N/1000 sq. ft. with the labeled rate of Primo.