Q.—Your opinion will be appreciated on this question. My greens (they are perfect) are fed with 12-6-6 (70 percent of N from ureaform), supplemented with powdered ureaform (38-0-0) and 0-0-50 sulfate of potash. My season average is about 9 pounds N and 5 pounds K. To date this year the greens have had 6.62 pounds N and 3.5 pounds K. Would you advise fertilizing again about November 1? I've heard many pros and cons about feeding after November 1.

(Indiana)

A.—With the carryover effect of the long-lasting slow-release materials, and the present excellent condition of your greens (after a rough summer), it would seem that no more N is needed this fall. I would recommend additional K from sulfate of potash to bring the season total to five pounds.

Most discussions about late fertilization center on quick-acting forms of N. With your program you could safely fertilize around November 1, but if the greens are perfect and growing well, why bother?

Q.—We are hearing a great deal about hydrated lime. Some report bad results with it in 1968; others swear by it as a great tool in hot weather. Can you help our thinking on this subject: 

1. What is the chemical reaction between hydrated lime and chemical nitrogen fertilizer?
2. Is it true that there is no reaction between hydrated lime and a solid ureaform nitrogen fertilizer?

(Maryland)

A.—The bad results appear to be associated with a) an overdose, b) using it too close to an application of soluble nitrogen fertilizer, c) applying it to grass that had been severely weakened by other agencies or causes. The good results were associated with light doses (½ pound to 1 pound to 1,000 square feet), most often used in association with 2 pounds to 1,000 pounds of a powdered ureaform nitrogen fertilizer.

Question one: Hydrated lime (Ca(OH)₂) is calcium hydroxide which combines chemically with soluble nitrogen materials to form ammonia gas (NH₃). This ammonia odor can be detected and a severe grass burn usually occurs.

Question two: Hydrated lime can be safely mixed with powdered ureaform in water. There is no chemical reaction because ureaform is chemically inert. Only soil microorganisms can release N from ureaform.

Some superintendents report excellent results from dusting hydrated lime on dry grass. This is fine if there is no wind and if there is a good duster available. Spray applications of hydrated lime and UF should be made in the evening after players leave the course. The material should be left on overnight (no traffic) and rinsed in early in the morning before mowing the green.