DON'T BE JEOPARDIZED

**Question:** Can you rototill organic matter into a sand mix and produce a satisfactory topmix for a putting green? (Ohio and Virginia)

**Answer:** There are several problems concerned with the use of a rototiller in preparing topmix for a putting green. First, it is impossible to mix materials of such diverse nature as sand, clay, silt, and organic matter uniformly by on-site rototilling. Secondly, rototilling "beats" the fine particles to the top, thus creating a layer at the surface. A cardinal principle of water movement in the soil is that water moves very, very slowly from fine to coarse soils. Also, when organic matter is incorporated into only the top four to six inches of a 12-inch topmix, a second condition of impaired water movement from fine to coarse materials is established within the 12-inch topmix. Rototilling on site to a depth of four to six inches, therefore, provides double jeopardy insofar as good water movement through soils is concerned. Organic matter also should always be mixed into the entire 12 inches of topmix. Off-site mixing is preferable by far; in fact, it is the only satisfactory way to prepare a mixture for greens built to USGA specifications.

BY HEAVY SALT INTAKE

**Question:** I had my green soils tested, and the lab report indicated that our soils are potassium deficient. Seven pounds actual per 1,000 square feet was recommended. Should this amount be applied all in one application? (New Jersey)

**Answer:** No matter how deficient your putting green soils, it is always good policy to apply nutrients in moderation. Established putting greens should not be subjected to heavy rates of nutrients, especially those of high salt index, and, therefore, it could be dangerous to attempt it. When in doubt, it is always good policy to apply nutrients more frequently at light rates.

AND LACK OF AERATION AND TOPDRESSING

**Question:** Does sand topdressing on putting greens encourage winter desiccation problems? (Colorado and Nebraska)

**Answer:** Not from our spring, 1981, observations made in Colorado, Nebraska, Montana and the Dakotas. Observation showed that golf courses on a sand topdressing program suffered no more desiccation than those that were topdressed with other materials. Most desiccation was observed on golf courses that were neither topdressed nor aerated at all, and thus were victimized by a fairly heavy layer of thatch or a compacted putting green soil.