



Turf Establishment — Stolonizing

by WILLIAM H. Bengeyfield, Western Director, USGA Green Section

Within the next 10 years more new greens will be stolonized with improved selections of bentgrasses and bermudagrasses than ever before in the history of golfing turf management. Improved techniques, better trained and more knowledgeable superintendents, a greater awareness of quality turf, and the demand for more uniform putting surfaces by the golfer himself have already set the trend in motion.

Stolonization, or the vegetative propagation of grasses, is not new to turf management. The first recorded use of stolons on a golf course was at Columbia Country Club, in Chevy Chase, Md. Even today, stolonization still remains as the only method of propagating genetically pure bentgrass and bermudagrass strains. Unlike seed propagation in which considerable differences within a species will develop, vegetative propagation insures the transmittal of all of the plant's characteristics to the next generation.

New and improved strains of bentgrasses are sorely needed today. We are still using the selections made by Dr. John Montieth in the 1930s. Arlington, Congressional, and Toronto varieties illustrate the point. Certainly these can be improved on even as U-3 bermuda has given way to Tifgreen, Sunturf, Tifdwarf, and others in the bermudagrass improvement program. However, since the market for creeping bentgrass is so small, it does appear that any new research in this direction must be supported by golf interests alone. No plant patent rights or protection are afforded to the private researcher.

Stolonized greens can be established just as easily as, if not more so than, seeded greens. The work crew and the entire operation require a higher degree of organization and preparation. The application of a complete fertilizer and proper pH adjustment should be made prior to planting time. When the stolons arrive, every-

thing should be in the "go" position. At best, stolons should not be stored for more than four or five days before planting.

Perhaps the most often overlooked point in succeeding at stolonization is the rate of application. No less than 10 full bushels per 1,000 square feet should be used. This rate is needed to insure crowding at the outset. Crowding forces narrower leaf blades and a tighter, more acceptable turf. Many golfers have remarked that seeded greens have a finer texture than stolonized greens. The reason is that the rate of stolonization is frequently too low to force adequate crowding, and by comparison, there are more plants per square inch in the seeded green. Therefore, be sure to plant at least 10 bushels of stolons for each 1,000 square feet.

Planting should start as soon as the stolons arrive. Hand distribution still seems to be the best of uniform application. Cover the stolons with enough soil so that only about 25 per cent of the plant continues to show through the surface. Of course, use the same soil mixture for top-dressing as was used in original green construction. After rolling and again adequately fertilizing (preferably with an organic fertilizer this time), uniform irrigation at proper intervals (keep the stolons damp) will bring the newly stolonized green into play. A minimum of 10 to 12 weeks of good growing weather will be needed before play should be anticipated.

When stolonizing greens, be sure to deal with a reputable stolon nursery. Poor material or



Photo by Geoffrey A. Hall

Stolons should be harvested in a "hardened" condition.

unknown sources spell disaster. The stolons should be harvested in a fairly "hardened" condition. If the parent material is "soft," overly fertilized, or in wet growth, it will not store well or develop strong, new plants. Of course, the nurseryman must be able and willing to guarantee purity of strain and freedom from weeds, bermudagrass and other foreign matter.

Stolonized greens offer greater uniformity of turf over the years, somewhat better disease resistance, and a greater adjustment to the climatic and growth factors.

Bringing Greens Into Play

by LEE RECORD, Northeastern Agronomist, USGA Green Section

How many golf course superintendents in the United States have experienced the challenge of bringing a new putting green into play? Success or Failure begins with the initial construction. On this foundation lies a challenging and rewarding accomplishment.

The initial construction has been completed; grades and elevations are finished; tile lines have been installed for drainage; the soil mixture and

seedbed have been prepared; seed, stolons or sod have been applied. The day of judgement begins.

Cultural practices from this day forth will determine the future condition of the course. Experiences will be your guide.

Water management is the most critical factor for germination and survival of your stolons or sod. Initially we are interested in the first few