Switching Seasonal Greens at Sea Island, Ga.

By **T. M. BAUMGARDNER**

Landscape Architect, Sea Island (Ga.) CO.

The Southeast encompasses a greater variation of climatic and soil conditions from its southern to northern most extremities than any other section of the country. Winter grass seeding time will vary as much as 2 to 3 months between the two extremes. Soil conditions range between the lightest of sands to the heaviest of clays. Good management methods in converting from one predominate putting green grass to another may vary almost as greatly.

Since I could not hope to intelligently discuss the varied problems encountered in this change-over procedure for all sections of the southeast and instead of merely dealing in generalities, of which most of you are already familiar, I will just try to tell you a little about how we handle this problem at Sea Island.

For the past few years at Sea Island, we have not interrupted play on either 9 holes for the seeding operation and we find that we have just about as good results as formerly, when we closed each 9 alternately for 2 or 3 weeks while seeding. We now start getting our greens ready for rye grass seeding in September by scarifying them thoroughly to remove any accumulated nap and coarse stolons and runners of the Bermuda grass.

We used to do this scarifying in October, immediately before seeding, when we were able to close each 9 for a time, but we found that by scarifying earlier, we have a better base of finer textured, young Bermuda grass at ryegrass seeding time, which prevents excessive wear on the tender rye grass seedlings and provides a better putting surface for the early fall months while the rye grass is getting started.

Scarifying by Power

Scarifying is done with the scarifier attachment on a Toro "Park Special" power mower, or the scarifier blade of the "Sensation" single rotary blade power mower. Fairly satisfactory results can also be obtained by severe hand raking, but we believe there is greater disturbance of the putting surface and, of course, hand raking is much more expensive because of the greater time and labor hours consumed.

Immediately after the scarifying operation, the greens are cut as closely as possible with the power putting green mower in two directions, then spiked and topdressed.

We mix with this topdressing approximately 20 lbs. of super-phosphate, 10 lbs. of muriate of potash, 25 lbs. of lime and 5 lbs. of arsenate of lead for each 1,000 sq. ft. of area (arsenate of lead application is for mole and cricket control).

We prefer not to do any nitrogen feeding at this time if the rye grass seeding time is a month or less away. Play is not interrupted during this scarifying procedure although the greens will be a bit stubbly and off-color for a week or two. Our greens are usually seeded with rye grass about the last week in October or the first week in November, depending somewhat on weather conditions. If the weather is unseasonably warm, we delay seeding until a little later. Rye grass seed is applied, after spiking, with a "Cyclone" seeder at the rate of approximately 150 to 200 lbs. per average 6,000 sq. ft. green and immediately topdressed, with no fertilizing at this time.

Fungicide, usually 2 parts calomel to 1 part corrosive sublimate, is applied at the rate of 3 ounces to 1,000 sq. ft. as a brown patch and dollar spot preventative, and greens are carefully watered every day until seed is well up. Play is not interrupted but greens are mowed a little higher than usual for about 2 weeks, then normal cutting height is resumed and greens are again seeded, using approximately 50 to 100 lbs. of rye grass to the green, and topdressed along with an application of approximately 25 lbs. Milorganite to 1,000 sq. ft. and a second application of fungicide applied, and normal cutting height is continued.

Substitutes Unsatisfactory

Our greens are normally spiked, topdressed and fertilized throughout the season thereafter at 4 to 5 week intervals, using Milorganite or sulphate of ammonia, alternating with 6-8-4 fertilizer mixed with the topdressing soil. Fungicide treatments are given only when weather conditions seem suitable for fungus disease development or at the first indication of brown patch or dollar spot on any green, all greens are treated. We formerly used a small quantity of red top seed along with rye grass seed but we have discontinued this practice because of greater susceptibility

of red top to fungus diseases. We have tried both bluegrass and Seaside bent on an experimental plot as a substitute for rye grass, but found neither satisfactory under our conditions.

It is practically impossible, as you all know, to follow any common practice or set rule in changing over from rye grass to Bermuda grass in the spring for so much depends upon weather conditions and observation of the condition of both the Bermuda grass and rye grass in the greens at the time.

Then too, no two courses can be handled quite the same due to variable soil and climatic conditions and the intensity of the Spring play on the particular course. For instance—at Sea Island we try to hold our rye grass in the greens pretty well through May because we want our greens in the best possible conditions for our heavy Spring season play and we often still have some rye grass in the greens well into June.

However, I know that on many courses it may be advisable to encourage the dying out of the rye grass sooner than this. This can usually be accomplished by heavily fertilizing with ammonium sulphate or ammonium nitrate (8 to 10 lbs. to the 1,000 sq. ft.) and watering thoroughly each day thereafter for a week or so and then if the weather man cooperates, let the greens dry out for a few days to encourage dying out of the rye grass.

Then the greens may be spiked and topdressed and seeded with Hulled Bermuda grass to encourage as quick growth as possible of the Bermuda. However, we have not found this method very practical at Sea Island because we find that we have too many bare spots in the greens where the Bermuda has not filled in to take the place of the rye, and we prefer to let the rye go out more gradually for this reason. Even then we may get a few thin spots on some greens in late May or early June, but under our conditions this is usually not serious.

We usually apply 5 to 10 lbs. of hulled Bermuda grass seed per green along with the April or May topdressing. The seedling Bermuda grass is finer textured for the first season or two but sometimes doesn't have much chance of competing with the established Bermuda stolons.

I believe a great deal of the trouble experienced in the change-over of rye grass to Bermuda grass, at least in our section, may be caused by poor drainage and poor aeration and unfavorable physical conditions of the soil. If the soil in the greens is well drained and aerated and has a well balanced proportion of humus and sharp sand, the Bermuda will naturally be deeper rooted and I think it might be said that the deeper rooted the Bermuda grass, the less trouble will be experienced in the change-over as well as, of course, throughout the season. With deep rooted grass, the change-over should normally be gradual enough to eliminate any serious bareness at any time.

I believe many courses which have resorted to such practices as seeding only half of the greens areas, or using two sets of greens, might have avoided this by improving the drainage and physical condition of the soil, along with intelligent handling of watering, fertilizing and topdressing.

Perhaps some day Dr. Burton, Dr. Grau or Dr. Noer will come up with a grass that will answer the southeastern greenkeepers' prayer, that is a suitable textured grass which will grow for 12 months in the year instead of 6 or 8; but, until that time, we will just have to worry along with summer grasses and winter grasses.

COURSE CONDITION TIED-UP WITH PRO SHOP SALES

Bob Munk, pro-gkpr. at the Jacksonville (Ill.) CC, sent out to his members a letter which brought pro shop sales by using a selling point that is logical but seldom considered. The theme of Bob's message was that the member who plays with inferior equipment on a well-conditioned golf course is not taking advantage of the excellent course he already has bought.

It's an angle that probably would occur to a pro-greenkeeper quicker than to a pro who doesn't have to get the course into good shape, nevertheless it's a point that can be effectively used in showing members that the pro and greenkeeper constitute a team working closely together for the members' profit in enjoyment.

Munk's letter is headed: "Would you play a Stradivarius with a broken bow?"

It reads:

Have you noticed the greens lately? Pure bent grass—no dandelions—no crabgrass—no clover—no mat—no grain—just pure bent turf—healthy and vibrant—smooth as a billiard table—putts true and straight from every angle.

Greens like these are not an accident. They require lots of money and effort. Why not take advantage of the country club's efforts to provide an ideal golf course by using good golf balls and fine golf clubs? If you want to play golf get every enjoyment the game can afford. I would rather play a mediocre course with a good new ball and a well-balanced set of clubs than to play the finest golf course in the country with an old battered-up ball and a set of mis-matched, poorly-balanced clubs.

This country club merits the use of good equipment!