

Changing Grasses on Putting Greens

By John Monteith, Jr.

During the past few years a number of golf clubs have been interested in the possibility of establishing new turf by sowing seed on old turf of an undesirable strain of creeping bent. On many courses the Virginia strain has proved entirely unsatisfactory and the club officials have been looking for some grass seed which could be sown on such greens and which could be expected to ultimately drive out the Virginia bent. Other courses have used a finer bent of the Columbia type and have found that this too was undesirable.



Raking a green planted with stolons of Virginia bent preparatory to seeding with seaside bent (the 16th green of the Country Club of Buffalo). The mat of old stolons was removed from this green in late August by vigorous raking and cutting. The seed was then planted and top-dressed.

We are frequently asked whether sowing seed of redtop, German mixed bent, Rhode Island bent, seaside bent, or some other grass would ultimately change the character of the turf. Unfortunately there is little experimental evidence available to furnish a reply to such inquiries. It has been repeatedly shown that the various strains of creeping bent planted with the stolon method will crowd out mixed bents, redtop, and other grasses produced from seed. The aggressiveness of the creeping bents planted with the stolon method usually results in the smothering out of even old, established grass plants produced from seed planted many years ago. In any turf there is always a competition between the various desirable grasses as well as against the weeds. The more vigorous grass ultimately survives. Since old, established turf of redtop, fescue, Rhode Island bent, and German mixed bent grown from seed has repeatedly proved to be

incapable of competing with creeping bents grown from stolons, it seems entirely unlikely that seedlings of these grasses would in turn be able to offer much resistance against vigorous, established creeping bent. Nevertheless we find many courses where attempts are being made to change the turf by sowing large quantities of redtop, fescue, Rhode Island bent, and German mixed bent. So far we have yet to see a green where this procedure has produced the desired results. There is however one variety of creeping bent, of which seed is available on the market, which has a better chance of surviving in the struggle against established turf of stolon-planted creeping bent. This is the seaside bent, which is sometimes sold under other names. When sown in a new seed bed this grass produces a very thick and desirable putting green turf. It spreads by means of stolons, just as do the other creeping bents, and therefore it is able to offer more effective competition against other strains of creeping bent than is offered by grasses which do not creep in this manner. A few instances are known where seaside bent has been sown and has become established on a creeping bent turf. In all cases where it has become



Metropolitan bent plugs planted in areas on a Richmond green where Virginia bent was too thin. From these circular plugs the Metropolitan bent will in a few weeks crowd out into the surrounding areas. It will soon entirely replace the Virginia bent.

established the stand has not been uniform, having resulted in a somewhat patchy appearance on the green. Nevertheless these results have shown enough promise to justify the expectation that by repeated attempts this grass may be able to entirely replace the old type of turf. In any case the use of seed for such purposes is uncertain, depending largely on the season and on the condition of the established turf. The Virginia type, especially, is apt to be injured badly by zonate eye-spot and to be somewhat feeble during the latter part of the summer and early fall. If seed of seaside bent is sown in late summer so that the seedlings may become established during the period when the Virginia bent is not able to offer much competition it is likely that the new grass can become sufficiently established before the Virginia has recovered enough to choke it out. On the other hand, after seaside bent seed is sown the weather conditions may change and be entirely favorable for the rapid recovery of the Virginia bent. In such cases there is very little likelihood that the seaside bent will ever get beyond the seedling stage. In any case

it is merely a gamble, with the odds usually very greatly against the seedlings. However it is a gamble which many courses regard as worth taking rather than to resort to the more drastic method of tearing up the sod and replacing with new sod grown in a nursery. The latter treatment of course is more dependable and probably would prove not much more costly in most cases. If seaside bent is desired, a good turf of this grass can be established in a nursery bed and transferred to greens at a time when play on the course is not heavy.



The new strain of creeping bent planted in rows across a green of Virginia bent on the old course of the Country Club of Virginia. The stolons of the new strain of bent were planted in rows in the spring and soon crowded out the old grass.

Another method of changing the quality of turf is to plant stolons of a more desirable strain of creeping bent. The Washington and Metropolitan strains have repeatedly crowded out weaker strains of creeping bent. As a rule these strains will very quickly replace Virginia bent if they are planted with the Virginia or even after the Virginia is well established. One method of planting is to rake old turf very severely and scatter the chopped stolons of the Washington or Metropolitan strain on the old turf, as if it were a new seed bed. This operation is followed by top-dressing, rolling, watering, and otherwise caring for the new turf as if the old turf were not present. After the new stolons are established they will gradually crowd out the old grass. Still another method is to make incisions in the old turf and in these press stolons of the desired grass. In changing the turf by planting stolons of a different strain of bent the green is put out of play only for a short time while the work is being done.