

Reviving A Controversy — Bentgrass Overseeding

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*Summer overseeding may be slow. It may also be a countermeasure to *Poa annua*'s constant reseeding.*

It was an old and accepted custom during the 1920's and 1930's. Overseeding greens with creeping bentgrass was just the thing to do. During and after World War II years it fell into disrepute and today has all but vanished from the tricks of our trade. But it is not quite dead and this article will not end the controversy.

Contrary to the thinking of most turfgrass men today, annually overseeding greens that are predominately *Poa annua* may not be such a wasteful practice after all! This is particularly true in the light of new equipment, new chemicals and accepted techniques. At least it offers a chance, a hope—long range though it may be—of re-establishing bentgrass in our northern greens.

Timing Is Important

If you were asked, "What is the best time for overseeding with Seaside?" you would probably reply, "fall or spring," and usually in that order. Experiment stations over the country agree that seeding is best accomplished at these times. But please take note: we are not

discussing ordinary seeding, such as seeding a bare piece of ground to develop a brand new turf. Rather, we are concerned here with 'overseeding,' i.e., seeding into an already established turf. There is a very real difference in the problems involved.

Shocking and controversial as it may be, a good case can be made for overseeding with bentgrass in the early and mid-summer months! For example, *Poa annua* growth is so strong, so aggressive during the cool spring and fall months that outside competition doesn't have a chance. However, during the warmer summer season, *Poa annua* is not at its best and bentgrass seedlings have a competitive edge. Furthermore, summer management practices today favor bent seedling establishment. Irrigation levels are generally more constant. Preventive disease control operations are in full swing. Soil temperatures are up and conditions for bent germination are usually good.

The "Catch"

Even under the best of circumstances how-

ever, overseeding mortality is extremely high. If the "catch" is even 2 or 3 per cent, you will be most fortunate. It is absolutely essential therefore to establish some kind of seed bed prior to summer overseeding. Aeration is probably the best method and, since it is summertime, $\frac{1}{4}$ inch spoons are suggested. The soil cores should be removed. In addition, several runs with a spiked disc or slicing machine will contribute much to the preparation process.

The aeration hole and slice mark will provide an ideal 'bed' for any incoming bent seeds lucky enough to land or be washed into them. There is usually enough moisture present within their confines to encourage germination and drying out is far less likely than on the putting green surface.

There is another advantage to aeration and spiking. If greens have been treated with lead arsenate, Betasan, Presan or other inhibiting agent, the aeration and spiking process will enable seedling establishment at a lower depth, out of the inhibitive or protective zone.* This is especially important on greens where *Poa annua* and bentgrass co-exist. Bent overseeding may still be accomplished during the summer season while *Poa annua* controls may be carefully practiced in the fall and winter season if conditions warrant.

Seeding Rates

What about the seeding rate? "The heavier the better" might be good advice, but of course there is an impractical limit on both ends of the scale. Generally, two pounds of Seaside or one pound of Penncross per 1,000 square feet is a standard. Of course if the budget can stand it, higher rates and even two overseedings annually (perhaps late June and August) are desirable and will introduce that much more bentgrass.

Instant Success??

No one can argue the high rate of overseeding mortality. No one need fear instant success from this program. It is strictly a long range proposition. Expect at least three to five years to pass before you "see" any progress and are visually rewarded. As with so many phases of agriculture, the program must be a continuing one to be successful. It will do little good to start it this year and discontinue it next. Consider it an annual operation for at

*Be sure to read the article by Dr. V. Youngner, University of California in the September, 1967 Green Section Record.

least the next five years. Then make up your mind as to its value under your conditions.

It is unlikely *Poa annua* will ever be collared by a single practice or management technique. However, when the right combination of techniques is put together, then it will yield. Summer overseeding may well be one of the techniques. Annual bluegrass is constantly reseeding itself. Continual bentgrass reseeding (at the proper time) may be a good countermeasure. Results to date would at least indicate this as a possibility.

Don't fool yourself! The practices of the old timers were not all bad. Overseeding has possibilities. Think about it.



Two hundred pounds of Seaside a year should be adequate for most 18-hole courses.

Some type of 'seed bed' preparation will be needed. Aeration is a good first choice.

