

## Transition—Some Rethinking

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**Q**uite contrary to the current "hot" topic at turfgrass meetings in the Southeast—bentgrass for putting greens—the hybrid bermudagrasses are going to prevail for a while longer as the predominant varieties. Therefore, with them we will continue to be faced with annual fall overseeding with various cool season grasses. Fortunately, though, the picture is rapidly changing. The worries over success are becoming less each year. Machines, techniques, fungicides and grass varieties have improved and are continuing to do so.

The days of common annual or Italian ryegrass for greens overseeding appear to be ending and with it will go many a sleepless night, ulcers and gray hair. Because the old ryegrass is so unpredictable during the spring as temperatures reach into the 80's, it may be well if its primary use be returned to hay and grazing purposes.

With approaching warm spring weather the superintendent had to worry daily about the sudden loss—overnight—of the ryegrass often before the bermudagrass could make sufficient recovery to maintain an adequate putting surface on its own. Thus he had to make every effort to bring the bermudagrass back as quickly as possible on one hand; on the other he had to intensify his fungicidal spray program to hold the ryegrass beyond its natural warm weather tolerance by trying to prevent severe disease outbreaks.

For most golf courses these are just bad memories, and that's all they should be because much better grass varieties have taken the place of the old annual ryegrass. The names are already familiar: Manhattan, Medalist 2, and Pennfine perennial ryegrasses; Pennlawn red fescue is now joined by Jamestown and Dawson as excellent varieties of very fine texture; Penncross and Seaside bentgrass also present excellent possibilities.

What are the advantages of these grasses over annual ryegrass? The answer to this ques-

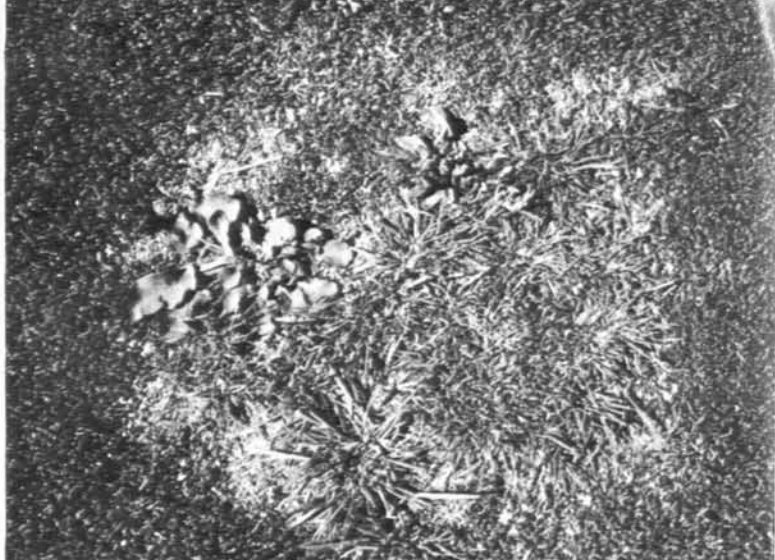
tion is the essential key to the title of this article. They are **more dependable** under stress periods that in the past destroyed annual ryegrass so quickly. The fact is these new varieties hold up so well that some superintendents feel they would persist all summer in areas where it does not get extremely hot and humid.

The spring transition period is then the area where we possibly should do some rethinking on our management philosophies, in particular how to handle the grasses during the spring. In general, superintendents, I feel, are somewhat impatient and want to bring back the bermudagrass quite early. They become frustrated and worried when they meet with little success because the winter grasses continue as a thick, healthy cover despite repeated thinning by verticutting. The new worry now is that the bermudagrass may not come back at all.

Our work at Clemson University with overseeding of Tifgreen, Tifdwarf and Pee Dee 102 over the past two years indicates that these worries are really unfounded if the bermudagrasses remain healthy during the dormant period. In direct comparisons of plots overseeded with annual ryegrass with those overseeded with perennial ryegrasses and red fescues, the transition has been almost unnoticeable with the latter. It occurs very gradually without abrupt changes in color or texture over a period of several weeks. On the other hand, annual ryegrass plots under the same treatments underwent the typical, very quick fade-out. The bermudagrass in these plots was very spotty and irregular in appearance. It was entirely unsatisfactory for golf use for several weeks.

How do we now look at our management program of overseeded greens during the spring transition? We know that such varieties as Manhattan, Pennfine, Jamestown, Dawson and the bentgrasses are going to persist considerably longer into the warm weather period than we have been used to with annual ryegrass. So, our

*Weeds take over in spring deadspot if the bermuda is not overseeded.*



thinking is now to let these winter grasses continue to grow so long as they provide us with a good putting surface. At the same time—over a period of four to eight weeks—we let the bermudagrasses recover at the pace dictated by soil temperature, winter grass competition, and fertility conditions. We use the aerifier and remove the cores completely to allow the green to dry a little quicker. Aerifying twice at an interval of a month has been considerably better than a single operation. At present we feel this is the most important practice to assure good bermudagrass recovery.

The effects of verticutting to thin the winter grasses in the spring have been different from what we expected and completely different from the results on annual ryegrass. The new perennial ryegrasses, red fescues and bentgrasses are much better adapted perennial turf varieties, all of which have the ability to regenerate new tillers quickly in contrast to annual ryegrass. If the latter is being thinned by verticutting in the spring it will be quickly forced out, but the perennial grasses will respond with tiller growth, if temperatures are not too hot, and continue to hold a very dense and fine turf.

Verticutting to seriously thin out these new varieties and really reduce their competitive effect should probably not be done until the bermudagrass is really ready to take over again. For as long as temperatures remain on the cool side, these winter grasses are being stimulated more by the action of the verticutter and the help for bermudagrass recovery is negated. Periodic light verticutting to reduce grain is, of course, advisable especially for bentgrasses which begin to creep quite rapidly during spring.

So, our philosophy of greens management during spring transition has changed considerably, primarily with regard to verticutting. We do it now about a month or six weeks later

than usual or at least not until the soil temperatures have warmed up sufficiently for good bermudagrass growth. There seems to be little benefit in verticutting for bermudagrass recovery earlier; these more durable perennial winter grasses just will not be discouraged that easily.

A very interesting side benefit from these longer lasting winter grasses has also developed. How important and practical it will be only the future will tell. In the spring dead spot (SDS) belt of the Southeast, the readily visible effects of this malady of hybrid bermudagrasses on putting greens have been largely obscured. Without severe verticutting, SDS areas remained covered by winter grasses for most of the summer in 1971. The fact that SDS was present was only discernible by the trained observer but generally not by the golfer. The picture has been much the same this year in comparison to areas that were overseeded with different winter grasses. Perennial ryegrasses and red fescues persist well into the summer and cover up SDS areas, while plots with annual ryegrass overseedings have been showing the detractive symptoms of the disease since April. Under both conditions the rate of bermudagrass invasion back into affected areas is about the same.

The new thought with spring transition is that superintendents may want to exercise more patience and let the bermudagrasses recover more at their own speed. The new winter grasses are not going to leave after the first few warm days. When the weather does get warm and the bermudagrass comes through the winter in good condition, it will effectively compete with the winter grasses and re-establish itself very well during the summer. The real anxieties should almost vanish if the superintendent learns how to properly handle his greens when he uses the more attractive, better winter grass varieties for green overseeding.