PAR FOR THE GRASS

W. H. Daniel, Turf Specialist Purdue University, Lafayette, Indiana

(Original talk presented at St. Louis Turf Day, 1967) In these days of televised golf, par is constantly assaulted by experts of the game. You, as turf managers, are more concerned about Par For The Grass than par for the course.

There is within each grass its tolerances and limitations, and no one has observed these more closely than turf managers. The extremes in weather conditions, the extremes in rates of use come **together** in **your locale** so that any variety of grass is tested. Professor Musser said that two bad years weatherwise tested a grass more than five years of ordinary weather.

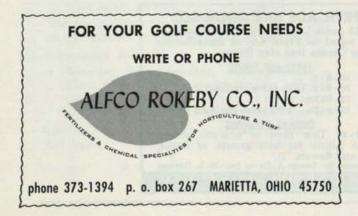
What is Par For The Grass? In Louisville, in Cincinnati, as well as St. Louis, the demands for fairway turf are unsettled. Some have chosen the bluegrass route, many have chosen the Bermuda route, some talk hopefully of the Zoysia route. Few are on the **Poa annua** wagon. This latter group may realize they will not hook their wagon to a star, but at least it is easy to get on the road.

One of the significant contributions to Par for Grass is the availability of **irrigation**, for by removing drouth as a contribution to failure, survival of desired grasses can be much improved. Whereas a few year ago the question was "Will I irrigate?" – now the question is, "How much shall I automate?"

Perhaps bluegrass, no bentgrass, is the most improved by irrigation, for the cooling effect of evaporation, the increased wear under turgid leaf conditions, and the continuous rejuvenation by new rhizomes and leaf growth give even bluegrass a much better chance even into the St. Louis area.

As another contribution, some **fungicide usage** to protect existing turf from deterioration by disease buildups must be anticipated with bluegrass, with bentgrass, with **Poa annua**; thus golf courses using four to six applications per year of fungicide on fairways may be able to counteract adversity and assure continued vigor. Thus, Par for Bluegrass is closely related to irrigation, fungicides and avoidance of failure or weakening.

Such is not the case for Bermuda. As you know, it has terrific powers of recovery. Its question comes at its weak points — winter survival, spring dead spot damage, dormancy conditions, early sprring drying, and **if these are to be circumvented**, then technology must be employed. In my mind one pre-requisite of Bermudagrass performance is a once-a-year intense aerification and verti-cutting as a part of rejuvenation, for we know young Bermudagrass is



usually at its best, and old, weakened Bermudagrass is most susceptible to damage.

When we switch to Zoysia there is some hew and cry about millipedes, billbugs and some eating insects. However, these do not appear major to me. Of all things we are best equipped to use insecticides, and to regulate insect population after the problem is understood; so on Zoysia these are just management problems. Long ago we accepted insect control on bluegrass and bentgrass as a part of bluegrass and bentgrass culture.

During the St. Louis Turf Day you observed the slit seed planters now developed. As we talk of highpriced seed, of special varieties, such planters look most appropriate as a way of introducing preferred grasses even at light rates.

Nitrogen fertilization on fairways has, in some locations, reached its peak and is drdopping back. Admittedly these were high peaks – 6 pounds N. per year in repeat applications, but there are some who are now talking about how little nitrogen they can use – not how much for fairways. When one considers thatch problems, disease problems and damage, then this makes sense. Nevertheless, one of the basic advantages of living over artificial turf is its phenomenal ability to rejuvenate and recover from damage. You have long ago learned fertilizing was a very valuable technique to encourage such processes.

Without a doubt the turf manager of tomorrow will be more variety conscious even though users, people, will continue to measure turf by its "greenness." Par For The Grass is the management challenge.



TAXES EXCEED BENEFITS

By the time the 21-year-old who goes to work (1967) retires at 65 in 2010, the value of the old age taxes he will have paid during his working life (including interest lost) will exceed by more than \$12,000 the benefits he will draw in retirement says Tax Foundation new study: Economic Aspects of the Social Security Tax." If such a man had saved a sum equal to his tax, and got 31/2% interest, he would accumulate more than \$32,000 by retirement date. On the same day the value of the social security payments he would get (assuming normal life expectancy) would amount to about \$19,000.

