

some turf problem should arise it surely will be met and solved.

In visiting golf courses in so many different areas, one naturally expects to find a considerable variety of soil and climatic conditions. But actually, the problems which confront the superintendent are basically similar. In regard to soil, good drainage, proper fertilization, increased organic matter content and reduction of compaction, all these are fundamental to growing good turf in any locality.

The selection of adapted grasses likewise is an essential, regardless of whether turf is being produced in the north, south, east or west. Naturally, the most suitable grasses differ in different localities, but the problem of finding the "right" grass is universal. As we learn to handle the different grasses, we discover that they are more cosmopolitan than we believed previously. We find bent growing in the south, and bermuda gaining a place in the north. As new strains are developed and greater knowledge of managing them is acquired, turf men everywhere will have a greater choice when selecting the grasses best adapted for their particular areas.

Another important problem is the human one—better turf for better golf is an objective that requires the cooperation of all those concerned with achieving it. Club officials, green committees, superintendents and professionals, all

have a common objective. As has already been cited, distributors of materials and golf course equipment can contribute a fine service by providing facts as well as the tools for course maintenance.

Turf research has a national viewpoint as the work in the different Agricultural Experiment Stations is being coordinated by the Green Section of the United States Golf Association. All the research work proceeds best by the guidance of turf advisory committees.

Central Plains Turf Meet At Kansas State, Oct. 25-27

Kansas State College and the Central Plains Turf foundation will conduct a three-day conference dealing with turf problems, at Manhattan, Kansas, October 25-27.

Prof. William F. Pickett of the college and Chester Mendenhall, Mission Hills CC, Kansas City, Mo., are in charge of the meeting.

First-day speakers include Dean R. I. Throckmorton, K-State; J. G. Firsching, park department, Wichita; Sam Shannon, cemetery superintendent, Manhattan; L. R. Quinlan, K-State; Ross McCausland, seedsman, Wichita; L. E. Lambert, golf courses, Dodson, Mo.; Chester Billings, Nebraska Univ.; Franklin Rose, Kansas

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highway commission, Topeka. Dr. H. E. Meyers, K-State; Raymond V. Olson, K-State; F. W. Smith, K-State.

October 26 speakers are to be Fred V. Grau, USGA; F. D. Keim, agronomist, Nebraska Univ.; H. L. Lantz, Iowa State college, Ames; G. Brinkworth, Minneapolis, Minn.; P. Carson, Stroudsburg, Pa.; J. W. Funk, K-State; O. J. Noer, Milwaukee Sewage Commission and R. A. Keen, K-State.

The conference is to close at noon October 27. Speakers that morning are to be H. R. Bryson and J. W. Zahnley of K-State and G. L. McCall of the DuPont Company.

TURF ROUND-UP FOR 1950

(Continued from page 35)

bluegrass, fescue and bent. Either Astoria or Highland bent (or a mixture of the two) is more satisfactory as a nurse crop and "quick-greening" is obtained to satisfy the "in-a-hurry" customer. Meadow fescue, up to 15%, is popular on the West Coast and in the northern part of the Midwest.

Manilagrass (*Zoysia matrella*) slowly is gaining headway in the deep South but its occasional failure as far north as Washington, D. C. limits it. Its very slowness to establish is against it.

The Z-52 strain of zoysia is gaining new friends and admirers rapidly. It is nearly as fine as manilagrass but completely winter-hardy and spreads much faster to form a crabgrass-resistant turf. Z-52 seems to blend well with the better cool-season grasses to form nearly the "foolproof" year-round turf. A fairway of Z-52 with Merion bluegrass would be so perfect that golfers wouldn't believe it. Seed can be produced in club nurseries after two years in solid turf. Turf from the seed looks good, too!

Near-perfect fairway (and lawn) turf has been maintained for three years at the Beltsville Turf under the Green Section's maintenance, using the coarse common *Zoysia japonica* as the base grass overseeded with cool-season grasses. The best combination turf with the fewest weeds under a system of no water and very little fertilizer and $\frac{1}{2}$ -inch to $\frac{3}{4}$ -inch mowing are the plots where Merion bluegrass has been overseeded (3 years ago). The bluegrass-fescue-bent mixture isn't far behind. From this "hunch" five years ago we have come to regard a zoysia-cool-season mixture as nearly the ultimate in fairway and lawn turf wherever crabgrass is a serious pest. It may be the future athletic field turf, too, except that bermuda will stand more punishment.

The new C-115 bent still shows no evidence of turf diseases after four years

with no fungicides. It is being tested at various places for performance under a wide range of conditions. Plots with a mixture of C-1, C-19, C-115 show promise but it is too soon to tell how it will work out. Our meager stock at Beltsville is under increase but don't call on us now for stolons—see your own experiment station first. Our Jap-bettle quarantine makes it very expensive to ship vegetative material.

U-3 bermuda slowed down in 1950 because of low temperatures. Even so, it provided the very best in tee-and-fairway-playing quality. Cool-season grasses are doing well in U-3 this fall. Some of the skeptics are saying, "See, I told you it wouldn't work," but it is still in the picture for those who want the toughest in tee turf or athletic turf. We wouldn't trade our U-3 lawn in College Park for any bluegrass lawn I've seen—it suits our family perfectly. But it never should be planted on a lazy man's lawn because it responds only to good treatment and close, frequent mowing.

Southern California has welcomed the Green Section's U-3 bermuda as the bermuda grass they would most like to have. It stays green long after common strains are brown. To be convinced read C. K. Hallowell's report on his visit to Southern California. They also seem to like the improved strains of creeping bent (C-1, C-19, C-52, C-15) which are out-performing turf from Seaside seed month in and month out. Merion bluegrass got a fine reception in California, outranking common pasture bluegrass on every count.

The Southeastern States gingerly are trying Tifton 57 bermuda for their putting greens but they can't seem to believe that it is so good that it will crowd out the common cotton-patch bermuda. It does, though! But, after they have a Tifton 57 green they still have bermuda which doesn't putt like bent. We have to face the fact squarely—soon all the important golf courses in the South will be required to have bent-like putting surfaces. The pros and the players—all are mentioning it. Players in the USGA's Golden Anniversary Open at Merion and the Amateur at Minneapolis Golf Club remarked on the "perfect putting surfaces" and on what a contrast (shock) it was when they got back to their bermuda greens. Please not that we do not advocate bent for the South—we are reporting demands that are being heard for greens that putt like bent which is the highest standard known to golf.

Few will question today the value of a mixture of grasses, provided the grasses selected are suitable performers. Here are some top-grade mixtures which have stood the test for 10 years: