Southwest Turf Men Meet

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Dr. L. G. Jones, Prof. of Agronomy, A & M College of Texas, Dr. O. J. Noer, Agronomist, Milwaukee, Wis., and others at the first Texas A & M short course, held Jan. 20-22, emphasized drainage as being the major problem confronting greenkeepers in the Southwest. With a great variation in rainfall from 5 to 60 inches in the state it is imperative that all greens be designed and constructed so they will drain properly at all times.

A uniform layer 6 to 8 inches deep of a medium sandy loam, containing 20 to 30% by volume of good quality fibrous organic material is considered ideal for establishing and maintaining good turf. Texture of the soil should be such as to allow 50% pore space, half of which should be occupied by water. Such porosity permits good drainage and aeriation of roots which are so essential in good turf culture.

It was emphasized that alteration of texture on a large scale is not practical, but on greens, which must support a good playing surface under adverse conditions of moisture, heat, and usage a good physical condition must be developed. Texture is not as important on Bermuda greens as on bents, though remarkable response may be elicited by improving texture on Bermuda greens.

Dr. Noer reminded that it was not possible to incorporate admixtures of humus, clays or sands after the turf is established; therefore on greens already established the topsoil must be built by repeated applications of good topdressings. Material used in composting a topdressing should contain enough medium to coarse sand and organic matter to allow soil to crumble if it becomes puddled by excess moisture. Sands of uniform texture should not be used as they tend to pack and prohibit normal root penetration. Excessive amounts of organic matter will develop springy and spongy turfs. If peat is used as the source of the organic material excessive amounts may cause scalding in the summer. Dairy loams and manure as a composting material are undesirable due to concentration of nutrients in large applications and rapid decomposition especially under the high temperature prevailing in the state. Fertilizer nutrients especially nitrogen should be applied as needed.

It was emphasized that surface drainage was the most rapid method of removing concentrations of water. The green should slope in 2 or 3 directions thus facilitating immediate run off.

Noer in discussing fertilizer stated that correct usage of nitrogen and water is one of the major problems in turf management. Nitrogen, he stated, should be applied at rate of 40 to 50 lbs. per green 2 or 3 times a year preferably in spring and fall. During hot dry weather no nitrogenous fertilizer should be applied. Phosphorous and potash applied twice a year at the rate of 5 to 10 lbs. of 20% superphosphate and 10 lbs. of 60 per cent muriate of potash per green maintain a sufficiently high fertility level of these nutrients.

Liming is quite often necessary to maintain a pH of 6.5 to 7, particularly in the more humid areas of the state. Contrary to popular belief Bermuda will sometimes respond to liming.

Turf Grasses for the Southwest

Potts and Warner in their discussion of adapted grasses named Bermuda as the most widely used turf grass in the southwest. A native of India it was imported to this country by way of the Bahamas and spread very rapidly over the entire south. This grass responds well to good management and fertilization. Under a supervised program of selecting and breeding adapted strains of Bermuda promise to compete favorably on greens with the better bent grasses. As a step forward greenkeepers who have observed small areas of Bermuda exhibiting desirable characteristics have been requested to send samples to the Texas Agriculture Experiment Station for further selection and propogation.

Of the more recent introduced species exhibiting possibilities Manila grass (Zoysia Matrella) is probably the most outstanding. Although a rather slow spreading grass, given sufficient time it develops a leafy, dense, highly desirable sod. It is very versatile, grows well in shade and remains green for long periods during the year.

Centipede grass, (Eremochola ophiuroides) as well as St. Augustine (Stenothaphrum secundatum) are desirable for fairways in areas having 30 to 50 inches of rainfall. Carpet grass (Axonopus affinis) is recommended on the less fertile,

more sandy areas located in high rainfall belts.

Under more arid conditions Buffalo grass (Buchole dactyloides) a low growing stoloniferous perennial native to the great plains, and Blue gramma (Bouteloua gracilis) a bunch grass, are recommended for fairways.

Potts and Warner further stated that yellow beard (Andropogon ischaemum) a new grass imported from the Mediterranean region primarily for forage, may under certain conditions give a very desirable turf for fairways. Although a bunch grass it will by close mowing grow flat, thus giving a desirable fairway turf.

Ferguson in his discussion of weeds in turf, stated where greens and fairways are managed correctly weeds are not a serious problem. The chief source of weed seed on greens is from topdressing, as many as 70,000 weed seed per sq. ft. may be distributed by topdressing. Ferguson states that the addition of calcium cyanimide at the rate of about 13 lbs. per sq. yd. to compost-ing material will not only speed up decomposition but will also destroy weed seed.

When the arsenicals are used correctly they are very good for the control of weeds. The newest weed killer, 2, 4-D, is being studied in Texas to find reasons for its erratic action under variable conditions. Ferguson emphasized that correct dilutions are essential in all selective sprays. Esters—salts of the acid—have possibilities when applied dry with fertilizer or sand.

Diseases

Dr. Grau, in discussing diseases of turf in Texas pointed out dollar spot, brown-patch, die-back and damping off are the most common diseases infecting greens.

On rye grass heavy application of nitrogen at time of planting produces a plant

highly susceptible to damping off. On the other hand after rye grass plants have become well established the use of a nitrogenous fertilizer may be effective in the control of damping off by stimulating a more rapid growth of the grass.

Scald can be attributed to poor management more than any other factor, therefore the amount and time of watering are very important.

At the banquet held in Sibsa hall Tuesday evening, January 21, 1947, Byron Nelson was one of the principal speakers. Following the banquet the Texas Turf Association was organized. Officers elected to head the new organization were Gordon S. Jones, C.A.A., Regional office, Fort Worth, Texas, President; Dr. Howard B. Sprague, Texas Research Foundation, Dallas, Texas and Sam Schneider, pro, River Oaks CC, Houston, VP, and George Aulbach, Amarillo, Sec.-Treas. After organization was complete 68 individuals joined the newly formed association.

The immediate aims of the association are to establish and promote a research, teaching and extension program for better turf in the state of Texas. The need for such a program was immediately apparent when it was pointed out that in the past agricultural technicians, in their search for suitable forage grasses, have discarded many strains of turf grasses because they were inferior from a forage standpoint, but did exhibit characteristics which are desirable for turf. Plans are now being made to establish a turf nursery in collaboration with the Texas Agriculture Experiment Station.

In addition to golf requirements a great deal of interest was manifested in turf for airfields, parks, playgrounds and roadsides. The conference attracted men throughout Texas, parts of New Mexico and Louisiana. Intense interest in turf in this section was evidenced by the 122 individuals enrolled.

Credit for the overwhelming success of this first Southwest Turf conference is due in large part to the untiring efforts of Prof. R. C. Potts, Dr. Fred Grau, Dr. O. J. Noer.

MIDWEST TURF MEETING

The Midwest Turf Conference, March 17-19, will be held in the Purdue Union Building of Purdue University. The conference is sponsored by the Midwest Regional Turf Foundation, Inc. Fee for the conference will be $5.00. Those interested in attending the meeting have been cautioned to submit their reservations at once to the Purdue Union Club, the Fowler Hotel, or the Lahr Hotel, all in Lafayette, Ind.