TIMELY TURF TOPICS

Issued By The

UNITED STATES GOLF ASSOCIATION GREEN SECTION

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BELTSVILLE, MD.

MAINTAIN YOUR COURSE SO THAT IT'S FUN TO PLAY GOLF

SPRING CARE OF BENTGRASS PUTTING GREENS: Now is the time to prepare your plans for renovating your putting greens for the coming year. The growing season for bentgrass is approaching rapidly, and it is considered essential that the following checklist be studied closely to fit it to your particular condition.

Matted Greens: Where matted conditions exist and a heavy "nap" has developed, removal of the "nap" in early spring will afford a quicker recovery of the grass at that season than at any other season of the year. Disease incidence is greater where this heavy "nap" exists, and attempts to control diseases are almost futile. It will be found that immediate recurrence of the organism is almost a certainty if this "nap" remains.

Serious thought should be given at that time to the hot summer months ahead, when watering will become a serious factor. If your putting greens are allowed to go into the hot weather covered with a heavy "nap" it will be almost impossible for water to penetrate the "nap" and enter into the soil when the greens are dry. Scalding of greens during the hot months of the year is aided by this "nap."

Complaints will also be forthcoming from your players from foot prints left on the surface where a heavy "nap" exists. Removal of this excessive covering of grass will produce a smoother, truer putting surface.

Heavy, Tight Soil: This subject has been discussed fully in the January and February issues of TIMELY TURF TOPICS. If such conditions exist on your putting greens, corrective action should be taken in early spring to avoid troubles which are likely to develop later in the season.

Fertilization: Application of phosphorus and potash are essential in early spring to provide balanced nutrition, while applications of nitrogen must be varied according to (1) type of turf; (2) soil conditions; and (3) climatic conditions. Early applications of nitrogen tend to stimulate *Poa annua* if it is present, and it will be advisable to defer application of nitrogen until the growth of bentgrass is well started.

Topdressing: An application of from 1 to 1-1/4 cubic yards of a good topdressing material to an average putting green (5,000 square feet) is considered to be an excellent practice in the spring, especially if your greens have been brushed and raked severely to remove the "nap." Subsequent topdressings may be made, depending upon the need for such applications to produce a true putting surface.

Disease Treatments - Snowmold: As soon as the snow melts on the putting greens, treat with an application of mercury (2/3 calomel and 1/3 bichloride of mercury) mixture, applied at the rate of 4 ounces to 1,000 square feet.

Dollarspot: Application of a mercury (2/3 calomel and 1/3 bichloride of mercury) mixture, applied at the rate of 2 to 4 ounces to 1,000 square feet per application, should give adequate control of this disease.

PROMISING NEW FUNGICIDES: The following paper was prepared for TIMELY TURF TOPICS by Dr. H. W. Thurston, Jr., Botany Department, Pennsylvania State College:

During the war years research on diseases of putting green turf and experiments on controlling those diseases were almost non-existent. Practical control on the country's numerous golf courses was made difficult by the war-induced shortages of mercury compounds, and resulting high prices. The chemical industry, however, has not been idle, and new fungicides in considerable numbers are coming from the nation's manufacturing chemists. That some of these eventually will fit into the turf disease control program seems a foregone conclusion.

In 1946, The Pennsylvania State College, one of the leaders in turf research, turned its attention once more to testing chemicals for disease control on grasses, with gratifying results.

Ten fungicides, including the old standbys, as well as the more promising of newer materials, were used side by side throughout the season on two greens in the Philadelphia area, with the result that one new fungicide already appears outstanding for the control of dollarspot, one of the most troublesome of turf diseases. This fungicide is known as experimental fungicide #531 and is a complex calcium, zinc, copper, cadmium chromate of low water solubility. It is a light green free-flowing powder that wets readily and may be used either as a spray or as a dust. While more work must be done with this material before definite recommendations can be made, it gave outstanding results in control of dollarspot at a dosage of 3 to 4 ounces to 1,000 square feet and at the same time did not throw the turf off color as the mercury treatments so frequently do.

The Rhode Island Station has reported also on a new fungicide known as Puratized 177, which is said to be a phenyl amino cadmium dilactate complex which, when mixed with an inert clay, may be used in a manner similar to #531. It is said to give good control of dollarspot and other diseases. Both of these new fungicides will be available for experimental use in 1947.

The following figures are representative of the Pennsylvania experiments and are from an experiment at the Philadelphia Country Club.

Control of Dollarspot

	Individual No. of spots per 10 sq. ft. July 4, 1946	Average number of spots for season - Thirteen Weekly Readings to Sept. 25, 1946
Check (untreated)	198	213
Caloclor	20	2
#531	53	4
Tersan	40	30
Puraturf	113	83
Zerlate	33	31
Phygon	218	252

This is indicative of the new things in store for the Greenkeeping Superintendents.

RESEARCH FELLOWSHIP: The USGA Green Section has established a Research Fellowship at the Pennsylvania Experiment Station, State College, Pennsylvania, beginning February 15, 1947. Mr. James Watson, a graduate of Texas A & M College, is the recipient. Mr. Watson is a Purple Heart veteran of World War II and is an honor student.

The object of the fellowship is to study the development of root systems of turf grasses in relation to various maintenance practices such as soil aeration, irrigation, and fertilization, as a guide to the minimum maintenance requirements of satisfactory or superior turf of various kinds.

The work will be conducted under the direction of Professor H. B. Musser, who has been in charge of the turf research at the Pennsylvania State College for a number of years. This is the first Research Fellowship established by the USGA Green Section since before the war. The Pennsylvania State College was selected to be the recipient of this

fellowship because of the intense interest which has been evident by the workers at the Pennsylvania Experiment Station in the field of turf. It is anticipated that this will be the first of a number of research fellowships which the USGA Green Section expects to establish at cooperating Experiment Stations in various parts of the country for the solution of a number of our most perplexing problems in turf management and also for the purpose of training more young men in this important and highly specialized field of agricultural research.

The money for this research fellowship has been derived from Green Section Subscriptions, which are open to commercial interests devoted to the production of better turf, and to parks, cemeteries, airfields, and all other turf interests which are not eligible to United States Golf Association memberships. The studies will be applicable to all phases of turf work and will not be restricted to a study of turf on golf courses.

CONTRIBUTIONS TO TURF RESEARCH: Contributions have been made recently to the USGA Green Section by the following golf associations for turf investigations at the Georgia Coastal Plain Experiment Station, Tifton, Georgia:

Southern Golf Association	$400.00	per year for 5 years
Georgia Golf Association	100.00	" " " " "
Augusta Women's Golf Association	10.00	" "
Florida Golf Association	150.00	" " " " "

Investigational work at Tifton, Georgia, is under the direction of Dr. G. W. Burton. Turf projects in progress at that Station were outlined in the May-June 1946 issue of TIMELY TURF TOPICS.

CONFERENCE FLASHES

TEXAS TURF CONFERENCE: The first annual Turf Conference held in Texas in conjunction with the Texas A & M College at College Station, Texas, was attended by over 125 people from all classes of turf. Golf course superintendents, including many pro-greenkeepers, made up the bulk of the attendance. Superintendents from parks and cemeteries, highways, and airfields helped to swell the attendance. All of the talks at the Conference were recorded and transcribed and will be published for distribution in a short time. During the dinner the Texas Turf Association was formed with about 65 members joining at once. One of the objectives of the Texas Turf Association is to encourage more research and extension teaching in Turf in the Southwest. The officers of the Texas Turf Association are: Gordon Jones, President; Dr. Howard B. Sprague and Sammie Snyder, Vice-Presidents; and George Aulbach, Amarillo, Secretary-Treasurer. Much credit is due to Mr. R. C. Potts of the Agronomy Department for arranging the program and the details incidental to the development of the program at the College.

OKLAHOMA: The first annual Turf Conference in Oklahoma was held at the Oklahoma A & M College at Stillwater, Oklahoma, January 27 and 28. One hundred people were in attendance at this Conference. All the sessions were filled and everyone agreed that this first Conference was indeed successful. The Oklahoma Turf Association had been formed prior to the Conference, with Bob Ervine, Oaks Country Club, President; and Labron Harris, Stillwater, Oklahoma, Secretary-Treasurer. Bob Dunning, heading the Research Advisory Committee, outlined a number of problems which require immediate attention in the prosecution of a research program. Briefly, they are: Eradication of Bermuda grass where it encroaches into bent putting greens; proper physical conditions of the soil; proper watering of putting greens; improved methods for aeration of soil; experimental testing of selected strains of bentgrass, Zoysia and Bermuda grass; and the establishment of fertilizer test plots for fairway turf. The Oklahoma Turf Association expressed themselves in favor of assisting in the development of the entire grass research program as basic to the development of a sound turf research program. One of the questions raised was the testing of various hardy grasses for their use in the golf course roughs.