## TIMELY TURF TOPICS

Issued By The

## UNITED STATES GOLF ASSOCIATION GREEN SECTION

ROOM 307, SOUTH BUILDING PLANT INDUSTRY STATION BELTSVILLE, MD.

FAVORABLE PHYSICAL SOIL CONDITIONS ARE BASIC TO GOOD TURF

IMPROVING POOR SOIL CONDITIONS ON PUTTING GREENS: Where poor soil conditions exist, due to a tightly compacted, fine textured soil, and it is determined that rebuilding cannot be accomplished, several methods are available to remedy the situation. The lack of proper air circulation and drainage resulting from this condition causes shallow rooting and thin stands of grass. During periods of cool weather and sufficient moisture, shallow rooting may not be a serious factor, but as the season advances to the hot days of summer, rapid evaporation and excess heat will make these areas more susceptible to scald and wilting. This will not and cannot happen where deep rooting has been encouraged as the grass will thrive on moisture out of reach of this heavy and rapid evaporation.

METHODS:

Tubular-time forking - either by hand tools or mechanically by machinery. Limitations exist for both of these methods: (1) excessive labor costs for the hand method and, (2) the scarcity of the necessary machinery. Several types of machines are available but large-scale production has not been initiated.

Mechanically operated drills - this accomplishes the same operation as the tubular-time forking. Machinery of this type is available and can be purchased on the open market.

Deep forking with steel forks - either potato forks or manure forks can be used. These forks should be pushed into the ground to a depth of 6 to 8 inches and wiggled back and forth in order to open up the holes. This method has worked very satisfactorily and is a rapid way, but it does not give so good results as do any of the methods mentioned above, because the soil is not removed from the holes but only compressed and tends to seal the soil around the holes.

Spike-disc (Wilder Strong) can be used but the holes made by this disc are too shallow and soon close and the operation must be repeated frequently to be effective.

Roller-spiker - this implement does not make deep enough holes to warrant its practical use; in addition it compresses the soil around the holes and seals the surface.

Many superintendents have remedied their poor soil conditions by building up and away from the trouble by means of successive topdressings of a good mixture (1 part soil, 1 part organic matter, and 1 part coarse sand). Over a period of years a porous and well-drained soil will be developed.

Mr. Al Linkogel of the Westwood Country Club, near St. Louis, has recently completed a mole-drain device for use on his putting greens. This implement accomplishes the same results as any of the above methods in improving the aeration and drainage conditions.

After the surface of the putting green has been perforated with a fork or any other device, it is not necessary to attempt to fill these holes with topdressing. It would be far more beneficial to leave the holes open to permit water penetration and aeration.

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The U. S. Golf Association Green Section, in addition to its national cooperative decentralized program of Research and Education, maintains a Service for U.S.G.A. member clubs and for U.S.G.A. Green Section Subscribers. The extent of this Service is not well understood by many.

Membership in the United States Golf Association is available only to regularly organized golf clubs in the United States. Green Section Subscriptions are available to all other turf interests which are not eligible for U.S.G.A. memberships, including commercial firms, cemeteries, parks, airfields, nurserymen, golf course and landscape architects, and interested individuals. This brings Green Section Service within the range of all those who are devoted to the production of Better Turf.

Green Section Service is of two kinds, Direct and Indirect.

<u>Direct Service</u>: This includes (1) advice through correspondence on the identification of grasses and weeds; examination of soils, topdresing, and other materials; the use of various chemicals for the control of weeds, insects, and diseases; advice on the use of various grasses and treatments for specialized turf uses; and all other details of Turf Management; (2) two copies of all of our publications are included with each membership or subscription; (3) Green Section staff members are available for consultation on any problem related to Turf Management. A limited number of visits are made on an allexpense basis to members and subscribers in cases of special need.

Indirect Service: Included in this Service are (1) the accumulation of information on Turf Management which has been gathered by the Green Section over a period of 25 years and which is being made available to cooperating experiment stations for their information and use; (2) the Green Section sends its staff members to Educational Conferences and Schools at no cost to the cooperating groups; (3) as time and personnel permit, individual visits are made to member clubs and to Green Section Subscribers in connection with the Educational meetings; (4) Green Section staff members write many articles for various affiliated publications; (5) the Green Section actively is encouraging the training of more men in Turf Management to assume responsible positions in the Research and Extension fields at Agricultural Colleges and to fill positions with commercial firms. Funds are being developed for the purpose of establishing Research fellowships at cooperating experiment stations. These fellowships will train men and, at the same time, will develop accurate research data on some of the problems in Turf Management. Through this procedure, members and subscribers will receive better service and more of the answers to their problems. The need is acute for more trained men to serve Turf Interests through established extension channels; (6) the Green Section assisted in the development of a Turf Management Conference in the American Society of Agronomy. This recognition has placed Turf Management on a sound basis, with the ultimate effect that this phase of Grass work will receive more attention from extablished institutions.

The Green Section supports the policy that "frequent local service is superior to occasional long-distance service." Support of this policy is evidenced by our co-operative decentralized national program of Research, Education and Service in the field of Turf Management. The continued effort of the Green Section in developing this program is dependent almost wholly upon funds derived from U.S.G.A. memberships and from Green Section Subscriptions.

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NAME FOR C-27: In line with our policy to name bentgrasses as soon as they have been tested and proven, and are in commercial production, the name COLLINS BENT has been assigned to C-27. This grass was selected at the Washington Golf and Country Club, Arlington, Virginia, in 1937, but due to the preoccupied uses of names associated with this club, it has been decided to name the grass in commemoration of the late William T. Collins, formerly Superintendent of the Arlington Turf Gardens. Many will remember "Billy" Collins and his fine work at Arlington. It was through his untiring efforts and supervision that the Gardens were immaculately maintained. This memorial will serve as a national recognition of his work.

TENNESSEE TURF CONFERENCE: The University of Tennessee's first Turf Management Conference was held January 6 and 7 in Knoxville. Over 40, representing golf courses, cemeteries and commercial firms from nine states (Tennessee, Kentucky, North Carolina, Alabama, Georgia, Indiana, Illinois, Ohio and Arkansas) attended this Conference. We commend the efforts of the University of Tennessee and members of the staff for arranging this Conference.

N. D. Peacock, Dean of the Agricultural College, opened the Conference by citing the need for Turf Improvement and stated that the University of Tennessee is intensely interested in developing a turf program.

Speakers on the program were:

Dr. G. W. Burton C. R. Runyan
Dr. J. G. Sturkie Dr. T. E. Longnecker
O. J. Noer Dr. Fred V. Grau
H. B. Musser G. E. Harrington

Dr. Eric Winters

Space does not permit a full report of all the important discussions in this Conference. Based on the discussions, the outstanding needs of turf in this region are:

- 1. A better dissemination of turf information and expanded practical demonstrations of proven Turf Management practices through extension channels.
- 2. Additional data on the conversion of ryegrass greens to Bermuda greens, and vice versa.
- 3. The development of adequate supplies of centipede grass seed.
- 4. The development of improved strains of Bermuda grass.
- 5. The improvement of physical conditions of soils.
- 6. Additional information on the fertility requirements of turf grasses.

## QUESTIONS AND ANSWERS

- Q. What fertilizer formula do you consider the best for allaround use for the average small home owner's lawn?
- A. The best all-around fertilizer for the average small home owner's lawn is probably a 5-10-5, which also is used widely as a garden fertilizer. If two types of fertilizers are recommended for the home owner, he is likely to become confused. We have learned through experience that the 5-10-5 is well balanced for the average home owner's use. The more highly concentrated fertilizers are more likely to burn the grass and thus are not quite so safe in the hands of the average home owner. We consider a fertilizer with an organic nitrogen content of 25% to 50% better than one which is entirely inorganic.