Vice-President Robert E. Scott, Jr. Bonnie View Golf Course Arlington, Va. Norbeck Country Chib Baltimore, Md. Rockville, Fd.

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Secretary-Treasurer Charles Schalestock

### surprisingly deep root systems if given the opportunity. TURF NEWS LETTER

(Official Organ of Mid-Atlantic Association of Golf Course Superintendents Prepared in Cooperation with the USGA Green Section) and beats. Morion (H-Z7) bluegrass looked auch better than countries of the

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# November 10, 1953

23 days after livitation, wills agreed thousand bluerass showed sign of the The November meeting of the Mid-Atlantic Association of Golf Course Superintendents was held at the Manor Country Club, Rockville, Maryland. Despite inclement weather, a good deal of the course was still under snow, it was gratifying to see the turnout of some 55 members. Hosts for this occasion were Mr. Carney, President; Mr. Fucks, Chairman of the Green Committee; and Mr. Parsley, Superintendent of the Manor Country Club. Messres. Carney and Fuchs were very loud in their praise of Ernest Parsley, their faithful and conscientious superintendent. Mr. Carney pointed out that despite the fact that the clubhouse burned down, making it impossible to carry on the many social functions, the membership of the Club increased by 100 members, indicating that the golf course is the main attraction at this time. Mr. Fuchs stated he has enjoyed coming to our past several meetings and hopes that we will continue to hold meetings of this nature. He also stated that such meetings were of mutual benefit to the club officials and to the golf course superintendents. We are greatly indebted to Messrs. Carney, Fuchs, and Parsley for a wonderful day at Manor.

#### EDUCATIONAL FEATURES

Dr. Robert M. Hagan of the University of California at Davis was the guest speaker for the evening. Bob gave a most interesting talk on the topic "Grass Roots Irrigation". He prefaced his remarks with a few interesting experiences with Charlie Wilson on the West Coast. Charlie, as you know, is Western Director of the USGA's Green Section office which is located at Davis, also - you'll recall I'm sure, most experiences with Charlie are interesting.

Bob first defined some basic soil terms as follows:

A Saturated Soil - is one such as we experience after a heavy rainfall - the soil has all the water it possibly could hold - all the pore spaces are completely filled with water - filled to the brim.

Field Capacity - sometimes designated as the normal capacity - that water which is held in the soil after the gravitational water has drained and the downward capillary movement has materially decreased.

Wilting Point - that point at which a plant begins to wilt (for the lack of

Available Water - as the difference between Field Capacity and the Wilting Point. The normal moisture range over which plants grow.

Emphasis was placed on the fact that until recently the top of the grass (the shoots) were the portions of the plant afforded most attention. The shoots were the portions of the plant which were visible therefore the roots were given a back seat, so to speak.

With the aid of a Green Section grant, Bob undertook the study of grass root habits of our more common turf grasses. He found that grasses will develop surprisingly deep root systems if given the opportunity. Some interesting findings under Davis conditions:

(a) Creeping red fescues and bentgrasses developed roots from 6" to 2' deep.

(b) Bluegrass roots were considerably deeper rooted than the creeping fescues and bents. Merion (B-27) bluegrass looked much better than common Kentucky bluegrass. The Merion bluegrass extracted water from a depth of about 6 inches beyond the activity area of common Kentucky bluegrass. Merion bluegrass is "the finest looking grass in the Central California area" according to Bob; it looked excellent 23 days after irrigation, while common Kentucky bluegrass showed signs of wilt badly in the same period.

(c) Kentucky 31 fescue extracted water at a depth of approximately three feet

with a few roots as deep as 6 feet.

(d) Bermudagrass (U-3 and common) extracted more water and had roots extending below a depth of 6 feet.

Bob then displayed this chart giving the very interesting data:

Grass	Maximum Depth of Water	Effective Rooting
But the second of the second	Extraction	Depth
Creeping fescue	30"	15"
Bentgrass (Highland)	30"	15"
Kentucky bluegrass	42"	24"
Merion bluegrass	54"	30"
Zoysia	42"	33"
Goar's fescue	4811+	42"+
Kentucky (31) fescue	72"+	48"+
Bermudagrass	72"+	48"+

In the second year of the test tabulated above, it was observed that some of the grasses failed to root as deeply as during the first year. Thus it was necessary also in most cases — except with the bermudagrasses, to apply water more frequently to these grasses to keep them thriving during the second year's growth. Here are examples of the watering intervals between 1952 (the first year of turf establishment) and 1953 (the second year):

Grass	Elapsed Days Before	Distinct Wilting
Creeping fescue Bentgrass (Highland) Kentucky bluegrass Merion bluegrass Kentucky (31) fescue Bermuda (U-3 and common)	14 days 14 " 24 " 30 " 36 " +	10 days 10 " 13 " 13 " 50 " (approx.)

In other studies little difference was observed in the depth of rooting between grasses cut at 1/2-inch and those cut at 1 1/2-inches for a period of about five months.

Dr. Hagan observed in his trials that on soils which drain well, the frequency of irrigation and the amount applied did not make any real differences in the effective depth of rooting. Therefore, where we have the opportunity of building the soil (such as under putting greens) it is important to give deep rooting every consideration through good soil mixtures to minimize some problems that accompany management of special purpose turf. Greater intervals between irrigations would, for example, reduce man-hours, and would help considerably with the problem of compaction. Too often, too little water is applied at too frequent intervals. In such cases, the grasses become accustomed to such treatment and depend on it - they suffer if drastic changes in water practices occur. Where possible it is advisable to water deeply and infrequently. To do this, good internal drainage through good soil structure is important.

Our speaker re-emphasized that the tests reported herein are results under conditions at Davis, California. He stated that results of any research tests should be looked upon from the standpoint of their application to local conditions. This is a very important aspect of a trained agronomist's job - to disseminate information obtained from research to the practical man under the many and varied conditions encountered by the practical man in different regions.

That (Bob's) effort was appreciated by those present was evidenced by the countless questions asked after his talk. We wish to take this opportunity to thank Dr. Hagan for his very fine presentation and we hope we shall have the pleasure of having him with us again at some future date.

(Editors Note: For more good data on the use of water read Bob Hagan's article "Know How to Water" in the February 1953 issue of the USGA Journal. Some of the charts Bob used in his Manor talk appear in this published article.)

### CONSTRUCTIVE SUGGESTION REPORT

Because we couldn't see the grass for the snow, there was no constructive suggestion report offered on the Manor Club. Seems like everytime we have a meeting scheduled for Manor Country Club, we encounter rough weather. Guess we don't live right!

### BUSINESS MEETING

Prexy Jim Thomas opened the meeting with the introduction of several guests who were present. These included Mr. Harry Easterly, Chairman of the Green Committee of the Country Club of Virginia; Mr. Percy LeDuc, official of the Argyle Country Club; Mr. J. T. Howard, who has recently purchased a club in New York; Mr. Richard Essex, Chairman of the Green Committee, Columbia Country Club; Mr. Walter Densmore, Past Chairman of the Green Committee, Belle Haven Country Club, 'Ve are pleased to note that the trend of attendance of Green Chairmen and officials is still on a very good level and we hope that it continues. Others introduced were Dr. Fred V. Grau and Robert Hagan, guest speaker for this occasion. Conspicious by his absence was our good friend Admiral Phillips, who missed his first meeting in several years to be present at the christening of the replacement of his ship that was lost in World War II, The Neosho. Mrs. Phillips did the honors.

### Editors Note:

The Officials and Members of the Mid-Atlantic Association of Golf Course Superintendents hereby notify all persons having been referred to or introduced as a guest for more than 22.5 times (or for a period of not more than 3 years)

at a regularly scheduled meeting will no longer be considered "Guests". If asked to make a statement you will be limited to three (3) works within a 15 minute period. All we want is the facts Gentlemen, just the facts.

Secretary-Treasurer Charlie Schalestock read the minutes of the last meeting and the treasurer's report. Both were approved as read.

Bob Shields then gave the Education and Policy Committee Report stating that the project "Operation Zoysia" for 1953 was completed in good shape. This seeding was done with common Zoysia Japonica seed at the following courses:

The Columbia Country Club, Washington, D. C. The Woodholme Country Club, Pikesville, Md. Glenwood Golf Course, Richmond, Va.

Each of these courses selected one acre of fairway area on which it had been difficult to maintain a good stand of grass. The zoysia seed was sown at the rate of 15 pounds to the acre in an attempt to establish a cover of zoysia. We will be very much interested in following the results of these tests in future years. The superintendents in charge of each course have charted the plantings and will, on occasion, keep us informed as to their progress.

In the absence of Jim Reed, Chairman of the Membership Committee, Reuben Hines, Sr. took over. The only new member proposed for regular membership was Mr. Wayne Jerome, Superintendent of the Congressional Country Club. Francis Coupe' proposed Wayne Jerome for regular membership. The application was acted upon favorably - welcome to the fold!

The Golf Committee had no report for the day as there was no golf due to the very bad weather. Members of this Committee were commended on their very fine handling of the Annual Golf Tournament held last month at Kenwood and for their very nice conduction of the past tournaments. Members of this Committee are John Leavell, Chairman; Bob Holmead, Ernie Stanley, and Carl Senseman. Nice job, fellows!

The election of officers was the next item on the agenda of the evening and this was handled very capably by Hugh McRae, one of our Past-Presidents. Jimmy Thomas was renominated to the post of President and was unanimously accepted for the year 1954. Charles Schalestock and Jim Reed were both nominated for Vice-President with Charlie nosing Jim out at a very slim margin. Bob Scott, Jr. was nominated and unanimously accepted for the position of Secretary-Treasure: These men are the same a brought us through the year 1953 in such fine fashion. They deserve a tremendous hand for the job that each and every one of them has done. There was a little reshuffling in the Secretary and Vice President's job but we feel that these men will be able to do a job on par with the one they did in '53 in the coming year. Congratulations again - the best of luck fellows - we're behind you 100%.

In the order of new business Mr. Connolly read the new Ry-Laws for the approval of the Association. With the exception of a few minor changes they were approved as read.

The Association wishes to take this opportunity to thank and congratulate

our friends and outstanding members, Admiral Jack Phillips and Mr. John Connolly, for the wonderful work they did in writing our new By-Laws.

### Special Announcement.

President Jim Thomas has received a letter stating that there is an opening for a Superintendent at the U. S. Naval Air Station, Oceana, Virginia Beach, Virginia. They have just completed a new nine hole course, and intend to build a new nine in the near future. For further information contact Jim Thomas.

### Good Reading

"U. S. G. A. Journal and Turf Management" United States Golf Association 40 East 38th Street New York 16, N. Y.

"Golfdom"
407 South Dearborn Street
Chicago 5, Ill.

"The Golf Course Reporter" Box 106 St. Charles, Illinois

### Coming Events

January 3-9: 25th National Turf Conference and Show of the Golf Course Superintendents Association of America, McAllister Hotel, Miami, Florida. A. M. Brown, Secretary.

February 8-9: Annual Conference of the Mid-Atlantic Association of Golf Course Superintendents, Lord Baltimore Hotel, Baltimore, Maryland. E. N. Cory, Director.

### Know Your Host

"Uncle George" Cornell, owner-manager of the G. L. Cornell Company, Worthington-Jacobsen distributor in this area is our host for the Cecember meeting.

The G. L. Cornell Company and its predicessor the J. S. Connolly Company have held this annual banquet for our association for many years. Every member looks forward to this occasion not only because of the excellent food and gracious hospitality, but also because it marks the end of another successful year in our program of developing our knowledge of turf. Speaking of accomplishments our host had a very successful year in Golf. George qualified for the National Amateur, and is the champion of his home club Congressional. Congratulations George, and good luck for 154.

George, Brownie, Frank, Mack and the entire Cornell organization welcome you and are looking forward to seeing you on Tuesday, December 1, 6:00 p.m. at 4715 Miller Avenue in Bethesda.

Next Meeting: Date: December 1, 1953 - Place: G. L. Cornell Co., Bethesda, Md. Feature: "McRae-ian steaks"

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