THE AUGUST MEETING of the Association was held August 2 at Sparrow's Point Country Club with approximately sixty members and guests on hand. President Frank Dunlap presided and introduced C.F. Rambe, member of the Board of Directors; W.A. Rouse, Club Secretary; J. Cordrey, Greens Chairman; Nicholas McGowan, Club Manager; John Jendrasak, Golf Pro and W.A. Leon, Past Greens Chairman. Also introduced was Joe Warner, grounds crew foreman who has been acting as Superintendent since Paul Weiss, Jr. moved to Delaware. Charles Hallowell of the U.S.G.A. Green Section made a short talk as did Jimmy Thomas, President of the Golf Course Superintendents of America.

GUEST SPEAKER of the evening was Mr. Lou Sullivan of American Agricultural Chemical Co. who spoke on "SOIL TESTING." Some of the points he made are listed here.

**SOIL TESTING** is defined as a rapid analytical method of measuring the soil pH and also the plant foods that are available in the soil. The value of this information is obvious. If the soil is too sour, the test will show this and to what extent and how much lime is needed to correct the acidity. If plant foods are deficient or if the fertility is out of balance, this will also show and corrective measures can be taken. The sample taking must be done properly or else the results may be as bad or even worse than no test at all.

**THE SAMPLE MUST BE REPRESENTATIVE** of the soil in the area from which it came. On a green 10 or 15 plugs to a depth of 2" is suggested. Fairway soil samples are taken from 10 to 15 borings or even more in the case of very large areas. The samples are placed in sample boxes provided or in new paper bags and allowed to dry, then taken to the laboratory. Information about the sample is important in helping the lab technicians with their work and should contain a complete description of the stand of grass, soil, drainage etc. For a better picture of what is going on in the area from which the sample came the lab requests a history of the fertilizer and lime program over the past year.

**RESULTS ARE RETURNED** with recommendations on the amount of nitrogen needed and how much phosphorus, potash and lime should go along with it. A feeding program for the whole season is also given, but we realize that a great deal of judgment is needed by the man in charge of the turf to get the best results from any program. Soil testing takes the guess work out of feeding and can prevent costly mistakes or point the way to correcting a bad situation that could be developing on your course.

**THE CONSTRUCTIVE SUGGESTION REPORT**, led by Report Chairman, Bob Shields, centered mostly on #10 green, how it got into the present condition and how to correct the trouble. The consensus of opinion was that this green should be stripped, the soil re-worked, then raked smooth and replanted. This work should be started at once. Greens other than #10 were in good condition, but some thatch build-up was apparent. Steps to control it should be taken now. Tees were not as good as they were in 1955 when the Association last visited the Point. The U-3 Bermuda grass should be given the management it likes - namely regular high nitrogen feeding and regular low cut, 1/2" or lower. Other courses in this area now have near perfect tees by using bermuda grass.
WHAT IS THATCH? This question was asked by a club official at Sparrows Point and we will attempt to answer it by referring to and condensing a talk made by Dr. Ralph Engle before a meeting of the Northeastern Golf Course Superintendents Association.

DR. ENGLE SAYS THATCH is a tight layer of living and dead stems, roots, leaves and grasses. This layer occurs between the green grass leaves and the surface of the soil. It is called "thatch" (indicating something undesirable) when it begins to cause us trouble. Just how thick this accumulation can be before it becomes "thatch" - no one knows. Dr. Fred Grau calls this surface accumulation "Cushion" until it causes trouble, then it becomes "thatch". This cover is a cushion against soil compaction, insulation against high temperatures and a reducer of moisture loss. It is certainly desirable on a putting green, but control measures should go on all the time to prevent excessive build-up. The troubles associated with thatch lead to many evils but seldom produces a simple single result that kills all 18 greens at one time. As the thatch layer accumulates on the surface less oxygen reaches the roots which means a shallower root system. If water isn't moving into the thatch and on through it into the soil carrying in the oxygen it should be forcing out the CO₂ and in turn pulling in oxygen laden air behind. Also, if water does not enter the soil neither can the normal supply of nitrogen, calcium, phosphorus and potash, since these plant food elements have to be in liquid form before they can be taken up by the roots.

THATCH ALSO CAUSES insect and disease problems. If water can't penetrate the thatch (used for house roofs in the South Pacific) the insecticides slide off the surface and don't move down deep enough to get destructive insects. Thatch is an incubation area for diseases and in some cases our fungicides can't penetrate to get at the source of the trouble.

WE HAVE MORE WATER PROBLEMS where there is excessive thatch for the same reasons mentioned above - the water runs off instead of in. The root system that develops under this condition is very close to the surface and suffers terribly if water is not applied at very close intervals. But frequent watering encourages shallow roots that require more water, etc. (If you meet someone in this vicious circle, it may be you coming back.)

WHAT SHOULD YOU DO if you have thatch? Keep in mind that it wasn't built up over night so don't try to eliminate it in one operation. First check you Ph and lime moderately or heavily as indicated by the test. Use the mechanical means at your disposal for cutting away some of the excess surface material but use caution here. Don't remove all the green canopy. Puncture the surface with any of the aerating tools available and top dress with the thought in mind that some of the top dressing must come in contact with the soil under the thatch. Lime again if Ph is not too high and use great care watering.

FROM THE SECRETARY, The Mid-Atlantic has the right to be proud of the fact that we are in second place among the Superintendents Association of the nation in the new National members signed up this year. Our record of 11 is exceeded only by Northern Ohio which had 14. The latest new member is Joseph G. Kaufman, associate and national, who is with American Agricultural Chemical Co.

DUES FOR THE YEAR 1961 become due October 1, 1960, as do National dues. Mid-Atlantic lapel pins are available at $1.00 each. Brochures of the 1959 Baltimore Turfgrass Conference can be obtained for $4.00. - Tom Doerer, Secretary.
NEXT MEETING, Up until the middle of August no place had been found for the September meeting. At the very last minute, just when it began to look like there would be no meeting this month, our friend John Leavell came through with an invitation to come to Shenandoah Retreat Country Club. The committee accepted at once and we are grateful to John for taking us.

NEXT MEETING

PLACE: Shenandoah Retreat Country Club, near Berryville, Virginia
Date: September 13, 1960
Golf: 12 noon
Inspection of golf course: All afternoon
Social Period: 5:30 - 6:30
Dinner: 6:30 pm
MEETING: Following dinner
HOSTS: John Leavell, Superintendent and Dr. R.M. Freeman, Owner.

COMING EVENTS

October 4 - Meeting at Laurel Pines, Laurel, Maryland
November (date to be announced) - C.L. Cornell Co. Annual Meeting
December 6 - Meeting at Westbriar Country Club

Invitation Form

Mr. Tom Doerer, Jr., Secretary Treasurer
Alexandria, Virginia

SIR:
You and the members of the Mid-Atlantic Association of Golf Course Superintendents are hereby invited to visit

( name of Club )

in the month of ___________________________________________ or ___________________________________________

( 1st choice ) ( 2nd choice )

for the purpose of holding your regular monthly meeting.

Signed: ________________________________
Golf Course Superintendent