



# MID-ATLANTIC News Letter



Director  
ROBERT MARTINO  
Editors  
JAMES E. THOMAS  
LEE C. DIETER

Published by  
Mid-Atlantic Association of Golf Course Superintendents to aid in the Advancement of the  
Golf Course Superintendent through Education and Merit

Vol. XIV

April 25, 1964

*page 1*  
No. 4



CLEAVER

## NEXT MEETING

The next meeting of our association will be held May 5, 1964, at Chestnut Ridge Country Club in Lutherville, Maryland. The course will be open for golf. Lunch may be purchased at the club in the grill room. Cocktails will be served from 5 to 6 PM with dinner immediately following. The Board of Directors will meet at 10 AM the morning of the meeting.

## OUR HOST

George W. Cleaver, our host and member of the Mid-Atlantic, has been superintendent of Chestnut Ridge Country Club for four and a half years. After graduating from Long Island Agricultural and Technical Institute in Ornamental Horticulture, George worked as gardener on a Dupont estate. Then he served as nursery manager and for five years worked with the Dupont Company in the weed control department. Upon meeting and talking to Mr. James Reid of Suburban Club, he decided to move to Baltimore and work for Mr. Reid as his assistant. George says he has been trained under one of the best men in the field.

## THE GOLF COURSE

Chestnut Ridge was open for play September, 1956. It is laid out on a former dairy farm with rolling hills, a beautiful piece of Baltimore County. The golf course contains 330 acres and the 18 hole course is spread over most of it with 80 acres in fairways. Two hundred pine and shade trees were planted last year and more will be put in this year.

## MAINTENANCE

The tees were planted with Merion bluegrass. They are cut at 3/4" through the growing season. All the tees are treated the same way, fertilized four times a year, two applications in the spring and two in the fall with a 10-6-4 analysis.

The fairways are predominantly Merion blue with a little scattered bent, fescue and bermuda. Last year they were fertilized four times, two in spring and two in the fall with a 10-6-4 fertilizer. They were aerified in April for the first time. The ph is a little low so they will be limed this fall or winter. The Merion blue in the fairways is cut at one inch throughout the year. There is no fairway watering system, therefore last summer they turned brown but came back in good shape.

The greens are planted with C-1 and C-19 and are cut at 1/4" all year. They receive 6 to 8 pounds of N annually from a 12-4-8 fertilizer.

## DIRECTIONS

From Washington and Virginia take Route 1 or Washington Expressway to the Baltimore Beltway. North on Beltway to Maryland 25 which is Falls Road north, about two miles on left is Chestnut Ridge.

## THE PRESIDENT'S MESSAGE

by Thomas Doerer, Jr.

We are in receipt of a letter from Mr. George Bird, president of the Middle Atlantic P. G. A., wherein the executive committee of the P. G. A. has appointed Mr. Dick Sleichter, golf professional at the Chartwell Country Club in Severna, Maryland, as their liaison man to promote more and closer relationships with our association. We, as superintendents, welcome this approach by the professional golfers. In turn, we have appointed our Mr. Robert Martino, superintendent at Island View Country Club in Sterling, Virginia, as our representative to attend a few of the P. G. A. meetings in order that we may learn more of the problems of the pros. Closer relationships between these two vital areas can and will make for more understanding and harmony, thereby improving the quality of service to their respective memberships.

Golf today is big business and growing larger each year. Because of this tremendous growth we feel it prudent to put our programs on a business basis through our exchange of ideas. Success can only be achieved through hard work and a sincere effort by both the professional golfers and the golf course superintendents.

Best of luck to Bob Martino and Dick Sleichter on their mission this coming year.

SAND - SILT - CLAY and Base Exchange -- A REVIEW by Dr. Fred V. Grau

Sand is a broad term covering many origins and uses. For our purposes in growing grass, sand includes the coarser mineral particles in the soil. Compared to silt and clay, sand particles are large and chemically inactive. They act as a framework with which the chemically-active part of the soil is associated. Sands increase the size of spaces between particles. This improves aeration and drainage.

Silt is a term that applies to soil particles intermediate in size between the sands and the clays. Silt particles do not cling together nor do they adhere to other particles, thus they have little influence on particle arrangement or soil structure. Chemical activity of silt is negligible except for the finest particles which approach the size of clays.

Clay embraces all mineral soil particles less than 0.002 mm in diameter. They exist as very small and thin plate-like crystals which expose extremely large amounts of surface. They are adhesive and they swell and shrink with water gains and losses. It is the clay that gives soil its character. There are essentially two kinds of clay: (1) montmorillonite and (2) kaolinite. Montmorillonite has the greater binding and swelling power.

Essentially the crystals of clay minerals are made up of layers of aluminum oxide and silicon dioxide which are bound together chemically by sharing certain oxygen atoms. In some crystals water can enter between layers and thus give the quality of expansion and contraction. Clay minerals that are spherical or cubical do not pack tightly together as do plate-like shapes.

Fine-textured (clay) soils are richer in total nutrients than coarse-textured soils (sands). A general average of some 27 soils from costal plain to arid soils showed these variations -- nutrient content:

	<u>Sand</u>	<u>Silt</u>	<u>Clay</u>
Phosphorus	.12	.18	.61
Calcium	2.61	2.57	3.07
Magnesium	0.47	0.77	1.70
Potassium	1.41	2.15	2.78

It is clear that the clay fraction of soils is far richer in nutrients than either silt or sand.

Clay minerals are complex negatively-charged nuclei (anions) which move toward the positive electrode when excited by electric current. The negative charge on the clay particle (nucleus) attracts and holds positively-charged ions (cations) such as H<sup>+</sup>, K<sup>+</sup>, Na<sup>+</sup>, Ca<sup>++</sup>, Mg<sup>++</sup>, etc. The process whereby one or more Base Exchange. It is this property of soils that makes it possible for a plant nutrient to be held by the soil against loss by leaching. It helps to explain how soils become increasingly acid in high-rainfall areas. Think of the clay particle as though it were a negatively-charged golf ball. By electrical attraction, the outside of the ball is covered with positively-charged particles (cations) of Ca<sup>++</sup>, Mg<sup>++</sup>, K<sup>+</sup> and others. As plants grow, they use these to maintain a balance. The most plentiful ions are H<sup>+</sup> (acid element hydrogen). With an increase in the number of H<sup>+</sup> ions the acidity increases until a point is reached when plants will not grow normally. Then we must apply lime and other nutrients which, in turn, replace the H<sup>+</sup> ions.

Finely-divided organic matter that has become colloidal in nature also can take part in base exchange activities. The capacity of the colloidal fraction of the soil to fix nutrients makes it a storehouse of fertility for plants. Colloids also bind tiny soil particles together into aggregates which function then as larger soil grains in promoting aeration and drainage. The word colloid is derived from the Greek words kolla, meaning glue, and oid, meaning like.

To summarize: Sands and silt have little or no chemical activity, contribute mainly framework to soils. Clays and colloids are chemically active mainly by the process known as Base Exchange whereby cations are exchanged on the surface of negatively-charged nuclei. Soil acidity is one well-known condition that is developed by this process.

#### CORRECTION

A misprint occurred in the next-to-last paragraph of the article on "Something About Soil-- A Review" by Dr. Grau in the March issue of the NEWSLETTER. It read "All land clothed with grass (we give not to golf courses)". It should have been "All land clothed with grass (we give a nod to golf courses)".

#### NATIONAL NOTES

by Bob Shields

The spring meeting of the Board of Directors of the GCSAA will be held April 24, 25, and 26th in New Orleans. This is going to be an important and involved meeting with many important decisions to be made. One is an answer to the question, "How far do we want to go as superintendents?". Shall the job move ahead as a profession or should it revert back to the farmer-greenskeeper type of job it used to be? Some superintendents think we are moving too fast while others think we are going too slow. Another question, "Shall we go along with our number one employee and let him lead us, with his knowledge and experience, to greater heights; or shall we switch 'horses' in mid-stream and change to one less experienced in our problems or perhaps less enthused with our work?".

At New Orleans, we will receive a full report from Price Waterhouse on the office management survey they have been conducting for us and full details of their findings will be reported to you at the May meeting.

Also while there, we will look over the facilities available at hotels and possibly schedule a future National Turfgrass Conference in this famous old southern city.

Ideas, subjects and speakers are needed for the conference program in Cleveland next February. If you would like to contribute, contact the writer and the information will be passed on to the program chairman.

#### POTASH AND THE GRASS PLANT

by Dr. W. K. Griffith

Potassium is only one of several essential nutrients for grass production. Nitrogen is another--and perhaps even more important on grass. Its outward effects are usually spectacular. The response is often so great that there is a tendency to forget or overlook the fact that other nutrients are also important.

Recent soil test surveys taken in Indiana and Maryland show that putting greens test 70 to 80% medium to low in potassium, over 60% for fairways, and 75 to 95% for new turf areas. The need for a closer look at potassium fertilization is obvious.

Why Low K in Soils? (1) As nitrogen fertilization increases, the amount of K removed from the soil increases through greater growth. (2) Frequent clipping and their removals remove large amounts of K. (3) Use of ammoniacal N replaces K on the soil colloid. Potassium is then leached out of the root zone. Where irrigation is used, K leaching will be increased. (4) The use of heavy rates of N tends to lower the exchangeable K available to plants.

The Role of Potassium (1) Helps form and translocate carbohydrates. (2) Helps resist drought. (3) Helps resist winter injury and improves turf density. (4) Helps retard diseases. (5) Helps protein formation.

Recognition and Action The first step in potassium fertilization is to recognize the need. The best method available is through soil testing. Using soil tests will help you to determine the best ratio and amount for your area.

In the past, the major turf fertilizers have been N:2:1 or N:2:2 ratio. However, the removal and need data indicate an N:2:4 ratio is more in line. Remember it is not any one nutrient that is important, but a balance of all to keep grass productive.

#### NOW IS THE TIME . . .

To have on hand an adequate stock of chemicals; such as, fungicides, herbicides,

GUSTIN'S BALTIMORE TORO

All Types of Power Turf Equipment

Greens Mowers - Tractors & Gangs

Complete Parts & Service

2205 E. Joppa Road, Baltimore, Md.  
NO 8-0500

**J. L. CORNELL Company**

4715 Miller Avenue  
Bethesda 14, Maryland  
Telephone: OLiver 2-6600



Golf Course  
Equipment  
and  
Supplies



For Golf Course Use

Seeds  
Golf Tag Fertilizers  
Milorganite  
Fungicides - Insecticides

F. W. BOLGIANO & COMPANY  
411 New York Avenue, N. E.  
LI 7-4800 Washington 2, D. C.

Specialists in Golf Course Maintenance Chemicals

Weed Killers - Insecticides - Fungicides

Fertilizers by Swift & Co.

*J. L. Milan Co.* 3216 Carlisle Ave.

Phone: 947-0898 Baltimore 16, Md.



**NATIONAL CAPITAL TORO, INC.**

928 PHILADELPHIA AVENUE  
SILVER SPRING, MD.

Juniper 5-1322

Fertilizers

Sprinklers

**TORO** POWER MOWERS • • • FOR MODERN LIVING

Complete Turf Maintenance Equipment

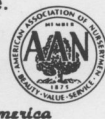
Complete Service Available

**WELL KNOWN  
FOR QUALITY**

Merion Bluegrass • Meyer Z-52 Zoysia • U-3 Bermuda  
Unlimited supply of premium turf grasses for golf  
courses, landscaping, etc. Acre prices available.



**SUMMIT HALL**  
*The First Turf Farm of America*



Gaithersburg, Maryland

(301) WI 8-2900

**Complete Golf Course Construction**

**MOORE GOLF, INC.**

DIVISION OF

MOORE, KELLY & REDDISH, INC.

Roads, Lakes, Playing Fields, Irrigation Systems  
Box 606, Orange, Va. Tel. 7357

insecticides, etc. for the control of diseases like large brown patch, dollar spot, and others - be prepared to combat unwanted weeds with both pre and post emergence materials - be on the lookout for cut worms, grubs, chinch bugs when conditions are favorable for their appearance. Apply new remedies with caution until they have become established and proven. Follow the manufacturers recommendations, and be sure to properly balance and calibrate all applications of products.

Poa Annua always causes concern in putting green turf at this season of the year, and while it is difficult to eradicate the pest, good cultural methods can assist in its control. Some of the suggestions offered to us are: good drainage, avoidance of over-watering or fertilizing too heavily when the plant is growing actively, prevent compaction as much as possible, verticut and remove Poa seed heads as they appear.

ALERTNESS FOR WHAT MAY AND CAN HAPPEN IS ONE OF THE REQUIREMENTS OF GOOD MANAGEMENT.

JOB OPENINGS

River Bend Country Club, Washington, D. C., area, 18 holes, about 4 years old, wants a superintendent. Contact chairman, Jimmy Doukas, at phone number 202-526-8350 during working hours.

Mr. Eldon Joiner, greens chairman at Waynesboro Country Club, Waynesboro, Pennsylvania, wants a pro-superintendent to fill job vacated by Paul McKenzie. Job pays \$5,100 plus shop sales, lessons and club storage. Contact Mr. Joiner at club address.

MID-ATLANTIC SUPERINTENDENT HONORED

Tuesday evening, March 31, 1964, our fellow Mid-Atlantic superintendent, Mr. Ernest E. Stanley, was honored by the golfers of the Marine Corps Schools Golf Club of Quantico, Virginia, with a testimonial dinner in recognition of his some thirty odd years of long and loyal service as golf course superintendent at the Quantico golf course.

Present for the occasion were many of the post's official family, headed by Lt. General F. L. Wieseman, the Commandant of the Quantico Marine Base, along with club members, and several of Ernie's friends of long standing.

Many fine compliments were paid to the Quantico green master by those in attendance. A review of Ernie's efforts and accomplishments over the years was made; his ability as a golfer and sportsman was highly commended, and great praise was given to his outstanding qualifications as a golf course superintendent.

One always finds the Quantico golf course in excellent shape, and it is a pleasure to play golf there. This is due to the efforts of a modest, unassuming, but highly efficient individual we all know as "Ernie" Stanley. We extend to him our congratulations and best wishes for continued success.

BY THE GRAPEVINE:

An old friend of ours, Mr. Charles G. Wilson, sales manager and agronomist for the Milorganite Turf Service, plans to be in this area the week of July 4th. It is his intention to visit as many of our golf courses as possible, and also to attend our July meeting. Charlie is an old Mid-Atlantic workhorse, and he has many friends in this section of the country. He was the father of the Mid-Atlantic constructive suggestion reports, an outstanding feature of our meetings for many years. Charlie, it will be a pleasure to have you with us once again, we are looking forward to the visit. You have stayed away too long.

RETIREMENT

James Harnett, our pension fund representative, reports that almost one fourth of the superintendents in our association have enrolled in the retirement program.

OUR SYMPATHY

To Robert Milligan on the recent tragic death of his brother, Ernest B. Milligan. Ernest, a captain in the Air Reserve was one of the fourteen victims of the mid-air crash at Clinton Air Force Base, Wilmington, Ohio. Surviving are his wife and three small children.

page six

FUTURE MEETINGS

The June 9th meeting will be held at Lakewood Country Club, Rockville, Maryland. host will be Jack Oulla. Dr. Gallagher of Amchem Products Corporation will be our guest speaker.

The July 7th meeting will be held at the Country Club of Fairfax, Fairfax, Virginia. Charles Schalestock will be our host. Dr. Indyke of Rutgers University will be our guest speaker.

On August 4th, the meeting will be held in Salisbury, Maryland. This meeting will be our first annual family picnic.

The September 1st meeting will be held at the Island View Country Club, Sterling, Virginia, with Bob Martino as host. Guest speaker for the evening will be Al Radko of the U. S. G. A. Greens Section.

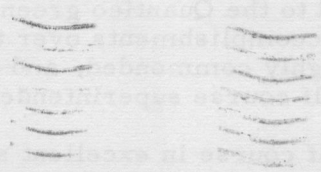
The October 6th meeting will be held at the Suburban Club of Baltimore County, Pikesville, Maryland. James Reid will be our host and Dr. Stephen Bechelder of Rutgers University will be the speaker.

Turf Valley Country Club, Ellicott, Maryland, will be the site of the November 3rd meeting. George Riddle will be our host and Dr. Jack Harper, Penn State University, will be our speaker.

The December 1st meeting will be held at Glendale Golf Club, Glendale, Maryland. The hosts will be Bernie Helig and Ray Shields. The annual election of officers will take place at this meeting.

SURVEY

Our Secretary Sheldon Betterly would like to have all of the regular members of the Association send in their completed survey forms to him as soon as possible.



**MID-ATLANTIC News Letter**

5007 - 34th St., North  
Arlington 7, Va.

