NEXT MEETING
The November meeting of the Mid-Atlantic Superintendents Association will be held on the 2nd at Crofton Golf Club, Crofton, Maryland. Anyone wishing to play golf will be welcome from 10:00 AM on. Lunch will be available. Drinks may be purchased at the bar from 5:30 PM to 6:30 PM. Dinner will be served at 6:30 with the business meeting following. Dr. Fred Grau will be our speaker for the evening.

OUR HOST
William J. Emerson worked at Wahconah Country Club in Dalton, Massachusetts, from 1956 to 1960. While at this club he attended and graduated from the Stockbridge Turf Course under Prof. Joseph Troll. The first three of these years Mr. Emerson was with David Canavan then Supt. at Wahconah. In 1961, he worked with Moore, Kelly & Reddish in Saratoga Springs, New York, building a public course for the state. From 1962 to 63 he was superintendent of Stockbridge Golf Course in Stockbridge, Massachusetts. In 1964, Bill came to Crofton to supervise construction of the course.
Bill is married to the former Patricia Cassidy of Pittsfield, Massachusetts, and has two fine children, Shawn 2½ and Sharen 3 months. Bill and his family live at Crofton.

THE COURSE
The community of Crofton is being developed by the Crofton Corporation; Mr. W. H. Crawford is its president. It will be a complete self contained community.

Crofton Golf Course is a 6800 yard, par 72 course laid out on gently sloping forested farm land. Mr. Edmond B. Ault designed the course; it was built by the Del-Val Construction Corporation of Trevosee, Pennsylvania.

MAINTENANCE
The penncross greens average 8,500 sq. ft., have plenty of cupping space and are cut four times a week. They were given 12 lbs. of N the past year; 10-8-4 and ureaform were used to supply the N. They are cut at 1/4 inch year round. A preventative spray program is practiced weekly.

The tees are merion and penncross and are cut at 3/4 inch twice a week. Ten pounds of N. was supplied from 10-8-4 and ureaform.

The watered fairways consist of pennlawn fescue, redtop and Kentucky bluegrass. They are cut at 7/8 inch twice a week. They were overseeded with Arizona hulled bermuda two years in a row. This fall they were overseeded with highland bentgrass and received 4 lbs. N from 10-8-4.

The roughs are K-31 fescue cut at 4 inches. They received 2 lbs. N from 10-8-4.

DIRECTIONS TO THE CLUB
From Washington: Beltway to route 50 East. Turn off at Maryland route 3 North. 6 miles to Crofton on right.

From Baltimore: Route 3 South. Crofton will be on left 21 miles from Baltimore.

BILL GLOVER TOURNAMENT
The second annual Bill Glover Tournament was held at Woodmont on October 12th. Forty-six members and guests played the well groomed course. Bob Shields was host superintendent.

The Bill Glover Trophy for low gross was won by Robert Martino with a 79, low net was won by Russ Kerns 89 - 19, 70. Other low gross prizes were won by L. Solley and Bill Emerson, Bob Miller and Ernest Stanley. Other low net winners were Sam Kessel, Stan Lawson, Charles Schalestock and John Milan. Other prizes were won by Rudy Spears, George Cornell and Jim Marshall.

All prizes were purchased and presented by the association.

The Bill Glover Trophy is presented annually by Joan Connolly.

POSITIONS OPEN
Reston Golf Club, Reston, Virginia, is seeking a qualified man to fill the position of Golf Course Superintendent. Salary open, fringe benefits. Eventual plans call for an additional 18 hole course and two nine hole layouts. Interested persons may contact Mr. Elmer Burch at 703-471-4307.

Springfield Country Club is taking applications from Class A Superintendents interested in the Golf Course Superintendent vacancy at their club. Salary open. Send resume and salary desired to Mr. Clyde Luther, Greens Chairman, Springfield Country Club.

NEW MEMBER
Mr. James F. Marshall, Superintendent at Oregon Ridge Country Club in Millers, Maryland, is one of our newest members.
The following cartoon was submitted for your amusement by Thomas Doerer, Sr., father of our president Thomas Doerer, Jr., and cartoonist and writer for the Baltimore News Post American. This is his impression of the poor, heckled Golf Course Superintendent.
### 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. Milan Co.
3216 Carlisle Ave.  
Baltimore 16, Md.  
Phone: 947-0898

### National Capital Toro, Inc.
928 Philadelphia Avenue  
Silver Spring, Md.  
JUniper 5-1322  
Fertilizers  
Sprinklers

### Summit Hall
The First Turf Farm of America  
Gaithersburg, Maryland  
(301) WI 8-2900

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

### F. W. Bolgiano & Company
411 New York Avenue, N. E.  
LI 7-4800  
Washington 2, D. C.

### 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.

### Moore Golf, Inc.
Division of Moore, Kelly & Reddish, Inc.  
Roads, Lakes, Playing Fields, Irrigation Systems  
Box 606, Orange, Va.  
Tel. 7337
COMING ELECTION
The nominating committee submits the following names for consideration in the annual
election in December.

President: Sheldon Betterly, Chantilly Country Club, Centreville, Virginia
Angelo Cammaroto, Bonnie View Country Club, Baltimore, Maryland

Vice President: Bob Martino, Island View Golf Course, Sterling, Virginia
Edward Morse, Maryland Country Club, Belaire, Maryland

Secretary-Treasurer: George Cleaver, Chestnut Ridge Country Club, Lutherville, Maryland

Directors (two to be elected for three year terms: Bill Emerson, Crofton Golf Club,
Crofton, Maryland; Bradley Strouth, Northwest Park Golf Course, Silver Spring, Maryland;
Russel Kerns, Greenhill Yacht and Country Club, Salisbury, Maryland; Bob Milligan, Gun-
powder Golf Course, Laurel, Maryland.

RESERVE THIS DATE
On Thursday, December 2, 1965, the Mid-Atlantic Association of Golf Course Superinten-
dents will honor their friend, Wilson Disney, with a testimonial dinner at the Washingtonian
Motel. Lets have a 100% turnout to honor our old friend.

WINTER PROTECTION OF GREENS -- J. R. Watson, Jr., Director, Agronomy Division,
Toro Mfg. Corp., Minneapolis, Minnesota

During late fall, winter and early spring, turf grass areas are subject to varying degrees
of injury. Such injury is directly related to soil environment, weather - especially temper-
ature and wind - and the amount of traffic - both foot and vehicular. In some years, if
climatic environmental conditions are optimum, little, if any damage may occur. In other
years, only slight variation in one or more climatic factors may produce severe winter
injury. Winter injury may be classified into rather general and broad classifications -
mechanical and physiological damage.

Mechanical Damage - This type of winter injury is produced by mechanical means. With
one exception, it is caused by man and may damage turfgrass directly or indirectly.

Direct injury to turfgrass is produced by traffic - foot and vehicular - when the grass is
covered by frost or when it is dormant or semi-dormant and the soil is partially or com-
pletely frozen. Examples are: 1) bruising (cellular rupture) resulting from traffic on
frosted grass - this is especially serious in late fall and early spring; 2) attrition caused
by traffic when the soil is partially or completely frozen. Such is especially damaging
when the grass is semi-dormant - it may be killed at this time by "scuffing."

Indirect injury to turfgrass is produced by traffic on partially frozen or wet soil. The
injury produced may be immediately evident (visible) or delayed (invisible). An example
of the visible type of injury is soil displacement - the footprinting and rutting caused by
traffic sliding and slipping, as well as walking or rolling. An example of the invisible
type of injury is soil compaction. This is certainly not confined to the winter months,
although it may be far more damaging during this period than generally recognized. Traf-
ic on greens, without the protection of living grass, will exert greater pressure (hence,
more compacting force) than when the grass is growing actively. This results, subse-
quently, in poor growth and may explain "problem areas" which show up in spring and
summer for no apparent reason.

Heaving - the one exception to mechanical damage caused by man is a natural phenomenon
caused by alternate freezing and thawing of the soil which simply pushes or "heaves" plants
with inadequately or poorly anchored roots out of the soil. Heaving may be especially
damaging to new stands planted late or without adequate nutrition or on poorly prepared
seedbeds.

Methods of preventing or avoiding all of the above types of mechanical damage, with the
exception of the injury caused by heaving, may be avoided by simply preventing traffic
during the late fall, winter and early spring when adverse weather or soil conditions occur.
It is recognized that this is "easier said than done." It is also recognized that, while such may be desirable from an agronomic standpoint, it is not desirable from the standpoint of the club or of the limited number of players who wish to take advantage of each opportunity to get outside during the winter. It is suggested that the superintendent, in cooperation with the Green Committee should: 1) thoroughly acquaint the membership with the potential damage from uncontrolled traffic; 2) budget funds to provide for additional maintenance required to correct injury and to bring the course into top playing condition in as short a time as possible the following spring; 3) prepare and present programs for diverting play to temporary greens (where such are feasible), for absolute control of traffic during periods of adversity and for re-routing of traffic to avoid damage to critical areas.

Potential damage or losses from heaving may be reduced on established turf by carrying out recommended management programs that insure deep root development. On newly established areas, heaving may be reduced or avoided by earlier planting, good seedbed preparation and providing sufficient nutrition to insure deeper and more profuse root development. Making certain that soil goes into the winter with an adequate supply of moisture will also protect against heaving. When heaving does occur an early light rolling may save some of the plants.

Physiological Damage - This type of damage suffered by plants during the winter months is generally referred to as "winterkill." Most "winterkill" is the result of either disease, dessication or low temperatures, under certain conditions suffocation and scald may cause severe localized damage.

Suffocation - Grass may suffocate a) if interchange of atmospheric soil gases is reduced or stopped; b) if excess carbon dioxide accumulates; or c) if oxygen supplies are reduced to a minimum. Such conditions exist when an area is poorly drained, the soil saturated for extended periods or the green covered with ice. The degree of damage expected from this latter condition may be directly related to the rate at which the plant is or was growing at the time of coverage. More growth - more damage.

Scald - Standing water or ice sheets may act as a lens under certain conditions. When this happens, the sun's rays are magnified to the point where the excessive heat produced may cause a burning or scalding of the turfgrass.

Methods of preventing or avoiding suffocation and scald are related basically to improvement of drainage-surface and sub-surface - to prevent ponding or accumulation of water and to breaking up of ice sheets when they occur. Topdressing, leveling or grading, installation of French drains and avoidance of overstimulation of growth late in the fall or during the winter are techniques and practices which help to offset winterkill caused by suffocation and scald.