NEXT MEETING
The August 3rd meeting of the Mid-Atlantic Superintendents Association will be held at the Plant Industry Station at Beltsville, Maryland. You are asked to assemble on the turf plots located west of the Plant Industry Station buildings to register between 9:00 and 10:00 a.m. There is no charge for registration. Programs will be distributed during registration. Luncheon may be purchased at the Station cafeteria and at restaurants located nearby. If you plan to remain overnight, please make your own reservations.

A short after-luncheon program in the Auditorium has been planned. The tentative Field Day Program is listed below:

1. Bermudagrass wear study.
2. Performance of Merion, Newport, and common Kentucky bluegrasses after seven growing seasons at three cutting heights and five rates of nitrogen and time of application.
3. Space-planted nursery of Kentucky 31 tall fescue, zoysia, and bluegrass.
4. Evaluation of bermudagrass selections and varieties.
5. Bermudagrass overseeding study.
6. Performance of several bentgrasses selections to preemergence crabgrass herbicides.
7. Exhibit of zoysia strains selected for fall cold-tolerance and early spring green-up.
8. Use of calcine clay in soil modification planted to several species of turfgrasses.
9. Control of thatch in Kentucky bluegrass turf.
10. Kentucky bluegrass variety and mixture trials.
11. Evaluation of Kentucky bluegrass selections.
12. Tall fescue study - treatments include three mowing heights, two mixtures, and nine rates of nitrogen and time of applications.
13. Performance of 400 southern and local bluegrass collections established in 4' x 4' plots.
14. Phosphorus study on bluegrass turf. Rates will include 0 to 4,000 pounds of actual P2O5 per acre at 500 lb. increments.
15. Heating cables for bluegrass turf.
16. Poa annua ecological study.
17. Red fescue shade study.

The Field Day program will be held Rain or Shine! Everyone interested in growing and maintaining turfgrasses is welcome. Invite and come with your friends.

OUR HOST
Our host for the day will be Dr. Felix Juska who, we are happy to report, is back at work after a recent illness. Dr. Juska has been turf research astronomist at Beltsville for the past ten years.

LOCATION
The Plant Industry Station is located on U.S. Route 1 between Beltsville and College Park, Maryland.

PRESIDENT'S MESSAGE by Thomas Doerer, Jr.
Over 100 attended the annual picnic held July 12th at the Cedar Crest Country Club. We wish to take this opportunity to thank Mr. and Mrs. Wayne Jerome for their hospitality and for the courtesies extended to the visiting superintendents and their families.

The weather was tailor-made for those who participated in the many activities planned for them by Wayne and the Missus. The unique Calamity Jane Putting Contest stole the show. We can give Art Loesius, the golf pro, and his wife credit for their hard work in setting up this affair. Ernie Stanley, the old sandbagger, won the day's golf event; my wife, Peg, won the ladies end of the putting contest. After all the children finished their swimming, horse shoe pitching, bingo and general all around fun, we were treated to refreshments and a delicious old fashioned picnic supper. There was plenty to eat, in fact, seconds were in order for those with hearty appetites.

After dinner the golf prizes were awarded by our golf chairman, Bob Martino. A few words of welcome by your president was followed by a welcome address from the president of the Cedar Crest Country Club, Mr. Joe LaSalle. Mr. LaSalle invited us to return to his club in the future for a similar affair.

Mr. James E. Thomas has invited the board of directors to meet at the Army-Navy Country Club, August 2nd at 3 p.m. I would appreciate all the directors to be in attendance for this meeting as we have several matters of importance to discuss. These matters are of both local and national nature. Mr. Robert Shields, our National President, would like to discuss his recent country wide trip to some of the other chapters.

NATIONAL NOTES by Bob Shields
Some exciting things are happening in the National golf picture that might be of interest to golf course superintendents.

Herb and Joe Graffis have announced the sale of Golfdom Magazine to Universal Publishing and Distributing Corporation of New York, the company that publishes "Golf Business" magazine. The Graffis brothers will stay on as consultants for about a year.

Joe Doan, who was managing editor for Golfdom, has been employed by GCSAA as managing editor and advertising manager for the "Golf Course Reporter." He will replace Eddie Erwin.
FAMILY PICNIC, CEDAR CREST COUNTRY CLUB
July 12, 1965

The Dieters, Kessels and Martinos

The Leon Browns and Purdy Carson

The Robert Milligans

Golf champs William Swick and Mrs. Thomas E. Doerer.

The Robert Shields and the Angelo Cammorotos

Mr. LaSalle, Club President, wins door prize.
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who resigned the position when our office was moved to Chicago. Joe has done an outstanding job for Golfdom and has long been a friend and booster of the golf course superintendent. We are certain he is the right man to handle the "Reporter" job.

The Professional Golfer's Association has announced the resignation of the association's Executive Director, Dr. Joe Ewers. He has been replaced by Tom Crane, who held the position before Dr. Ewers was employed early this year.

Membership in GCSAA was 2204 as of the first of June and still going up. This is an increase of 119 over last year. Six new members were added in May making a total of 132 to date for 1965. There have been nine deaths this year.

At the Kentuckiana Superintendents meeting in Paducah, Kentucky, on June 15, yours truly was made a Kentucky Colonel and given a framed scroll and membership card to prove it. The Kentuckiana chapter presented a metal ash tray on which the following words were inscribed: "We are proud of our fellow Kentuckian, Bob Shields, President of GCSAA 1965."

Ben Chlevin reports from Chicago that establishment of our new headquarters office at 3158 Des Plaines Avenue, Des Plaines, Illinois, is well under way. New people are being employed and trained and new furniture and equipment is being arranged as it comes in. A small official opening ceremony has been scheduled for some time around the middle of August but nothing elaborate or expensive is planned.

**MID-ATLANTIC GCSA LADIES NIGHT REPORT**

by Frank Haske

On Tuesday, June 29th, the ladies of our Association and guests were entertained at the Washingtonian Motel for its third Annual affair.

We had an excellent turnout and I am sure those in attendance had a most enjoyable evening.

The Association extends its sincere thanks to our Golf Course Suppliers for their cooperation in sponsoring the fine cocktail party we had prior to the buffet dinner. We would like to mention the companies that made this possible:

G. L. Cornell Company; F. W. Bolgiano Company; Gustin's Baltimore Toro; Kapco Division, Summers Fertilizer Company; National Chemsearch; Virginia Pine Bark Processing Company; John Milan Company; H. T. Campbell and Sons, Inc.; Humix Corporation; Princeton Turf Farms; S. W. Barrick and Sons, Inc.; American Agriculture Chemical Company; Rokeby Chemical Company; Miller Chemical Company.

**BENTGRASS GREENS IN THE TRANSITION ZONE**

When we grow bentgrasses in areas that are normally indigeneous to warm season plants, such as bermudas, zoysias, etc., the establishment and culture of bent becomes extremely difficult and exacting. The achievement of success will depend greatly on the correct use of all the techniques we know of, plus the use of all the tools of trade we have on hand. The fact we are trying to grow a plant out of its natural environment creates a challenge, one permitting of few mistakes. As a first step in the right direction our putting greens need to be built correctly.

This means that proper construction becomes a must from the start of the work to the completion of the job. First, let us start from the base and foundation level of the new green we are building, keeping in mind that the sub-surface and top level grades should be identical, and have similar drainage patterns. They should remove excess drainage and seepage water fast, and in several different directions. This will call for some contouring of surfaces, and should be done under the guidance of a golf course architect. All undulations should be gentle and flowing not severe and sharp, as easy lines of mowing and plenty of cupping space are desirable. Particular care needs to be taken to avoid pockets which would create depressions and basins for the accumulation of ponded water.

An adequate tile system built into the sub-soil is a necessity, preferably one of a herringbone pattern, with the side laterals spaced not more than twelve feet apart. The ditches for the laying of the tile to be dug to a depth varying from 18" to 24". They need to have a slight fall towards the system's base and outlet. The bottom of the trenches to be filled with three inches of crushed stone, pea gravel, or concrete sand. Then on this fill the drainage pipe is placed end to end with thin strips of tar paper placed over the top of the
pipe seams so as to prevent the entrance of unwanted materials into the discharge lines. The next operation is to cover the tile with the selected fill material, coarse concrete sand is preferred as it settles less than other fills. This covering is then brought up to the top level of the sub-soil grade.

Now that our tiling is out of the way, we are ready to place top-soil into position. It should be a fill of at least 12", the deeper the better. The mixture should be a light friable soil of good tilth, and needs to contain some organic matter but not to excess, just enough to retain necessary moisture and plant nutrients. Its porosity wants to be high so as to afford good water percolation, and have sufficient voids for the penetration of air and plant foods. Such a soil profile is conductive to deep rooting, and is resistant to compaction.

How do we go about obtaining such an ideal soil, as it is an artificial one? We do it by modifying the native soil at hand, by adding and mixing sufficient materials to meet desired specifications. This mixing is best done off the site, and needs to be done very thoroughly before being placed into position. An ideal mixture is ⅔ loam and ⅓ concrete sand, then to this add ⅓ pea gravel and incorporate it well into the first mix. Grass planted into such a made soil has deep and strong roots. What we are trying to create is a physical soil having prescribed mixtures of materials sufficient to afford adequate percolation of water and the infiltration of oxygen in proper balance. Yet, not too much, nor too little. First we find this out on a small scale through trial and error.

When our top-soil is in place, everything is ready for the fine grading of the finished surface. To this, it would be advisable to work in some dolomitic limestone, an organic fertilizer, along with some arsenate of lead for protection against grubs, etc. As soon as this is completed, planting is in order either with seed or stolons. Should the choice be seed, Penn-Cross bent produces a fine strain of grass when sown at the rate of ½ pound of seed per one thousand square feet, this rate of sowing is sufficient to establish a good sod.

Should stolons be the planting selection, a good choice is C-1 and C-19 bents in combination, (the Arlington and Congressional strains of creeping bent). They are more resistant to disease and stand up better under heavy traffic. Another strain often used in the warmer zones is C-7 Cohaney. Some do not like its light apple green color, but the grass has many fine qualities. It is very tolerant of high temperatures, grows more upright than most bents with less grain, tolerates very close mowing, and the strain appears to have a deep root system. However, it may not be as disease resistant as C-1 and C-19. Cohaney is susceptible to dollar spot, and often takes on a chlorotic yellow cast if not properly managed and maintained.