TURF NEWS LETTER

(Official Organ of Mid-Atlantic Association of Golf Course Superintendents
Prepared in Cooperation with the USGA Green Section)

THE ANNUAL BALTIMORE TURF CONFERENCE

The 26th Annual Conference of the Mid-Atlantic Association of Golf Course Superintendents was held at the Lord Baltimore Hotel, Baltimore, Md., February 8 and 9, 1954. About 108 members and guests were present at this two day meeting, indicating our 26th Conference to be the largest and most successful ever held. As always, the credit of the success of this top-notch conference goes to our good friend, Dr. Ernest N. Cory. We extend to Dr. Cory our sincere appreciation and thanks for his expert handling and coordination of these conferences.

Among the guests present was a strong delegation of members from the Philadelphia Association of Golf Course Superintendents. We are always happy to have them join us at our meetings. In this regard, it was an extreme shock that one of its pioneer members, Thomas E. Dougherty, Superintendent of the Springhaven Club, Wallingford, Pa., passed away suddenly at the hotel on the eve of our Annual Conference. Tom was an outstanding superintendent and a friend to all. Tom was Springhaven's superintendent for 38 years.

Al Radko, Acting Eastern Director of the USGA Green Section, aptly summarized the educational features of the Conference proceedings by presenting the following report. As this contains the meat of the entire sessions, it is appropriate that we present it in our News Letter; hence the avoidance here of any further comment. We take this occasion to thank Al most heartily for the fine job he has done in making such an excellent summary available to our members and giving us his permission to publish it in this issue.

The following becomes even more remarkable when you consider that Al wrote it during the conference while the speakers were talking and delivered it as the last speaker on the program. Good work, Al.
BERMUDA AND ZOYSIA GRASS MANAGEMENT

Panel discussion led by Dr. Fred V. Grau. Members of the Panel: Charles Schalestock, Bob Elder, Bob Shields, and Jack Harper.

Advantages of well-managed U-3 bermudagrass:

1. Weeds are no problem
2. Less water required
3. Grass at its best when most used
4. More uniform turf
5. Covers and heals rapidly
6. First cost is last cost
7. Better golf lies
8. Cushion, not mud, through winter
9. Wear and traffic resistant — with the prospect of auto-carts to add to the wear caused by caddy carts a tough grass is going to become more and more important.
10. Can use labor force to better advantage when a full force is available during the summer months.
11. Can use equipment to better advantage — at present it is necessary to mow during the summer months even though the cool-season grasses hardly make any growth — but weeds do.
12. In early spring it is usually very wet — cool season grasses grow very rapidly — hard to keep up with mowing — therefore minimizing the necessity for tractors on a wet course.

Disadvantages

The panel stated there were no insurmountable objections.

1. No available seed — large plantings are difficult and laborious — need for planting devices.
2. Bermudagrass is a heavy nitrogen feeder — aggressive when fed, poor turf cover when not adequately fertilized.

3. Planting material in short supply — superintendent should establish his own nursery.

4. Problem of healing over in off season — does not heal over divots or trafficked areas when dormant.

5. Straw color, however, the panel felt that color was not important in the off season — it would not be objectionable at a time when only a few play — it is at its best when the bulk of the members play, and use it — and this is in the summer time.

Golf is played on grass, not color.

ZOYSIA VS. BERMUDAGRASS

Advantages of Zoysia

1. Greens up earlier in the spring — stays greener longer in the fall.

2. Zoysia is more shade tolerant.

3. Zoysia is slower growing — therefore possibilities as a buffer between bentgrass greens and bermudagrass fairways is a point to consider. Also along edges of sand traps where bermudagrass is so aggressive Zoysia might be used as a buffer there too.

4. Zoysia is more tolerant of wet areas.

Disadvantages of Zoysia

1. Slower growing

2. More costly

3. Slightly less drought tolerant.

It was further stated by panel members that there is definitely a place for both grasses on golf courses. Zoysia could be used on shady tees, wet areas, around aprons and sand traps to keep bermuda under better control. The best varieties to use are those proven winter-hardy in this area, which are U-45 bermudagrass and Meyer Zoysia. In addition the natural selections that many superintendents have found on their golf courses which have survived and spread over many years are also very worthy of consideration.
The best time to plant sprigs or stolens is from spring through summer — dormant plugs or sods also can be planted with success throughout the dormant period. This makes it possible to take advantage of the off season labor problem, and in addition planting plugs in off seasons offers less interruption from play. Hard-wear areas such as tees are best to sod — it is difficult to establish sprigs or plugs under heavy traffic. It was further stressed that during the period of active growth it is important to fertilize these grasses properly. It is important to maintain and manage the grass to suit its particular requirements.

INSECT CONTROL

Dr. J.C. Schread, New Haven, Conn.

Dr. Schread presented a fine story on the tremendous amount of work being done in entomology at the Connecticut Experiment Station. This Station is one of the most active in insect control in turf. Dr. Schread stated that there are 650,000 species of insects, many of which are injurious to plant life. Many years ago there were only a few insecticides to work with — these included arsenate of lead, nicotine sulfate, rotenone, and a few others. Today there are many new ones which are more powerful and therefore less actual toxicant is needed to obtain the desired effect. As an example, arsenate of lead was first used at the rate of 450 pounds to the acre for the control of grubs. Later DDT at 25 pounds to the acre was used. Today chlordane at 10 pounds of actual toxicant to the acre gives the desired results. There are newer toxicants which are being tested at lower rates — meaning that less bulk is handled, requiring less labor, as well as being more economical.

The chinch bug problem in turf has been one of concern to many. Ten pounds of actual toxicant to the acre will control that bug. Dr. Schread pointed to the excellent control obtained at a course in Pelham. Chlordane lasts several years in the soil. However, chlordane will leach down beyond the effective range for chinch bug control. Chinch bug is a surface feeder and it may be necessary when the bug is active to re-apply chlordane for control. Two to 2-1/2 pounds to the acre at that time is sufficient. Chlordane has also given effective control of ants. Where ants are a real problem, there is considerable injury to mowing equipment — dulling effect on mowers. Holes made by aeration equipment are perfect havens for insects. Therefore, it is a good idea to treat with chlordane just before or after aeration.

Dr. Schread then gave a very comprehensive and interesting story on the control of pests on ornamentals. From the aesthetic standpoint, ornamentals are very important to club members. Attractive plantings of ornamentals enhance the beauty of a club.

He stated that insects are produced rapidly. It is important to know the life habits of the insect in order to apply the treatment in the most vulnerable stage — which is the immature stage. It is important to do a thorough job of spraying — a half hearted job will not be effective. Many new materials are being tested and the role of each was stressed — every
Insecticide is useful only in certain ways — there is no panacea for the control of all insects. A newer development in the insecticide field is that of granular forms of chlorinated hydrocarbons which are now being produced. The advantages of using granular forms are:

1. No drift
2. No possible residue
3. They are mixed easily with fertilizers
4. Good control is obtained

**EXPERIENCES IN 1953**

Dr. O.J. Noer, Milwaukee, Wisconsin.

Dr. Noer presented a very interesting Koecklide tour of golf courses in the nation. He stressed many fundamentals of good management and maintenance, all of which are applicable and very important to growing good turf. No attempt to detail these points will be made here except to emphasize the following:

1. Look to the primary causes of turf injury. The correction of secondary causes will not remedy primary deficiencies.

2. O.J. stated that even south of the Mid-Atlantic area oftentimes it is difficult to establish bermudagrass from seed, as the seedlings do not become established sufficiently to cover in one season.

**WATER SYSTEMS FOR GOLF COURSES**

F.J. Brennan, Goulds Pumps, Inc., Seneca Falls, N.Y.

In thinking of a water system for a golf course it is important to have a qualified pump man to study your problem and to talk over present and future requirements of the system. Each problem must be studied individually. An aerial map of the land showing elevations and topography is important. The size of the pump depends upon available water supply. Mr. Brennan spoke of many types of pumps but recommended the centrifugal pump because it is easy to maintain, easy to take down or replace — there are less moving parts. He suggested that the pumps should be located as close to the water supply as possible for best results, less friction loss. He stated that pipe sizing comprises a very involved set of calculations — study the problem throughly before installing a water system. If it is ever necessary to replace a water system, call in a specialist before you remove it. He can learn a lot about your requirements from the old system.

**GRASS PLANTING — METHODS AND DEVICES**

Dr. Fred Grau, West Point Products Corporation, West Point, Pa.

Dr. Grau presented a very well illustrated review of methods of planting grasses — not only seedlings, but vegetative means also. He stressed that the development of new grasses and vegetative selections have brought about the development of new methods and new devices to do the job.
Many of these ideas have been fostered by superintendents, many by progressive commercial firms -- new machines were developed and many old ones modified to do the job. New equipment to establish turf cover from seed, sprigs, plugs and strip sods was illustrated. Principles in planting were stressed -- it is important to get the seed down in contact with the soil and firmed lightly -- vegetative plantings -- the firmer the better. The importance of sterilization of the soil in a nursery bed was emphasized because of no competition from weeds. Machinery designed to introduce improved vegetative selections into established turf were also shown. Dr. Grau stressed that we are entering a new era in this area. Emphasis has been placed on vegetative plantings. We have to learn how to do the job economically -- mechanized planting devices which can do the job quickly are needed.

THE IMPORTANCE OF PUBLIC RELATIONS TO THE GOLF COURSE SUPERINTENDENT

John Gonella, Golf Writer for the Washington Post (after-dinner speaker)

Mr. Gonella left this wonderful message with the Association:
SELL YOURSELF INDIVIDUALLY AND COLLECTIVELY -- public relations are important -- make known the wonderful work that you are doing through any medium possible. He suggested mimeographed bulletins written by the superintendent and distributed to the club membership -- make yourself and your work known to your membership.

DRAINAGE


The panel left no question in anyone's mind that drainage was very important in growing good turf. Drainage and plant life are synonymous -- air, surface, sub-surface, and tile drainage are all important. One of the main criteria by which we judge good turf is by its root system -- if drainage is good, roots are good, the turf is good. In order to have good drainage it is necessary to have a good balance of air, water and soil. Soil is a dynamic system, soil is not static -- soil is a growing medium -- has movement and life. It is important to keep the movement of air and moisture in soils -- once either becomes static trouble occurs.

Tile drainage is well worth while -- it is there to be used if needed -- it is good insurance -- the cost is small when you consider the value of the turf above it and the savings of headaches over the years. Aeration devices are good illustrations of tools used to improve soil conditions and help the movement of water and elements through the soil. No doubt was left by any of the panel members that good drainage is very important to healthy turf.

WEED CONTROL

Col. H.B. Musser, Pennsylvania State University, State College, Pa.

Col. Musser introduced his topic with the statement that he was sorry to say that the term "weed control" came into common usage -- it conveys the thought that weed control is a thing separate and apart from good cultural practices to the production of good turf. Where grasses are healthy and vigorous, weeds are not a serious problem. Where we have proper drainage,
fertility, water management, height of cut, insect control, disease control, weeds are a minor problem. Weeds are not the cause of poor turf -- poor turf is the cause of weeds. Burt emphasized the angle of weed eradication and mentioned the work being done at Penn State and at Marshall Farnham's course in the eradication of crabgrass. He spoke of the work being done with contact herbicides, pre-emergence herbicides, chemicals to attack crabgrass seed production, and mechanical treatment (the verti-cut machine). He stressed that these were tools in the production of good turf. The latter tools are refreshing new angle to attack the crabgrass problem. His first year's results looked promising but he stated that we still have to learn to use these tools properly -- if we do we have another tool to do the job of crabgrass control.

TURF DISEASES

Dr. Wm. Klomparens, Michigan State College, East Lansing, Michigan.

Dr. Klomparens presented a well-illustrated talk on the principles of plant diseases -- how and why they occur. He gave a better insight on how to go about controlling them. He defined plant disease as the interaction of a parasitic fungus on the host plant. In order to have a plant disease you must have the following factors: (1) environment (water and temperature), (2) parasite, (3) a host. Fungi are minute organisms -- they reproduce rapidly. In addition they form various types of fruiting bodies which have the faculty of forming spores and other dormant bodies which can live for many years in a dormant state. They have the ability to regenerate themselves when conditions are right to attack plants. There are many races or strains of these organisms and they move about in many ways. Some are wind-blown -- some are transported on mechanized equipment and on the shoes of individuals. Bill pointed out the importance of preventive and protective sprays. Fungi are ever-present -- they are never completely eradicated; therefore these preventive sprays are very important. He stated that there was a direct correlation between thatch and disease. The cultural side of good management and maintenance are important to the reduction of disease incidence on a golf course.

ANNOUNCEMENTS

The Secretary has the names of two clubs that are seeking Superintendents. Anyone interested in these openings contact Bob Scott, Jr. for details.

NEXT MEETING

Glenwood Golf Club March 2
Cool Lane, Richmond, Va.
Golf at 12 noon, Dinner and meeting at 6 p.m.

KNOW YOUR HOSTS

Bill Leverton, Joe Cockrell and Glenwood Country Club in Richmond play host to the members of this Association on March 2 for the first time. Glenwood will be new to most of us, but Bill and Joe, the father-in-law son-in-law team, are old friends to all of us. Bill joined the Association way back in the early thirties, and was Secretary at the time of the National
meeting in Washington in 1937. To him fell most of the details of arranging for that event and we are going to call on him for help and advice when we are ready to ask the National to come to Washington again. Bill leased and operated White Flint Golf Course for many years and was always ready to try out a new grass. Some of his Zoysia Matrella plots planted years ago are still thriving and are now about the best samples of that grass in this area. Joe is Bill's son-in-law and is the most active member of the team at the present time since Bill has turned over more and more responsibility to him to go with his title of general manager. After joining our Association about four years ago, Joe immediately became aware of the importance of grass to his golf business and has been eager for more information ever since. He is a hard worker, young, handsome and sincere and we predict a bright future for him in golf.

Transportation Committee

Washington Area - George Cornell, Bob Holmead, Wilson Disney
Baltimore Area - Jack Witcher

This is one committee that never complains of over-work, so if you don't want to drive to Richmond call one of these fellows and arrange a ride with them. This will help all to become better acquainted.

Richmond being further south is a couple of weeks ahead of Washington area in weather, so get the clubs out of the storage closet and get a preview of what your golf game is going to be this summer.

The Baltimore group should leave for Richmond no later than 8 a.m. The Washington group no later than 8:30 a.m. Try to be on time so we can get the meeting going on time and get home earlier.

Directions:

Follow U.S. 1 or 301 from Washington or Baltimore to junction U.S. 250 in downtown Richmond. Turn left on 250 to Junction U.S. 360. Turn left on 360 and follow about 1-1/2 miles to first traffic light then turn right on Cool Lane to Glenwood Club.

There is a shorter way, but this is the easiest route since it can be followed by looking at the small city map of Richmond on the back of your state road map.