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NEXT MEETING

The September meeting of the Mid-Atlantic Golf Course Superintendents Association will be held on the 14th at Chantilly National Golf and Country Club. The course will be open for play any time during the day. Lunch may be purchased in the grill room. Cocktails will be served from 5 to 6 PM followed by dinner and the meeting. Our guest speaker for the evening will be Dr. Elwyn Deal from the Agronomy Department at the University of Maryland.

OUR HOST

Sheldon R. Betterly came to Virginia upon his graduation from Purdue University where he received his B.S. degree. His major in Turf Management equipped him for the profession he entered. Sheldon has been superintendent at Chantilly for six years. He has seen it through completion of construction and several very droughty years. In spite of the poor native soil, Sheldon has maintained a fine course and won admiration of his fellow super-intendents.

THE COURSE

Chantilly was one of the first courses designed by our local architects, Ed Ault and Al Jamison. It is laid out on a flat piece of former dairyland in Fairfax, Virginia. A large 15 acre lake adds to the interest of several holes and trees were added to eventually take the openness away. The 6610 yard, well trapped course has a par of 72.

MAINTENANCE

For the first two years, the greens of 1 and 19 bent grasses were cut at 5/16 and 3/8 of an inch to develop a body and holding capability that was not possible to obtain from the soil alone. They are now cut at 1/4 inch except for the summer months when they are cut at 5/16. They receive at least 10 pounds of N annually from U.F. in three applications, one spring and two fall with supplemental feedings of inorganics as needed. Sheldon blames some of his problems on poor internal drainage and feels that his greens would be much better if properly drained.

Fifteen of the tees were rebuilt, regraded and planted to Tifway 419 bermudagrass. The winter of 62-63 had serious effects on the 419 planting and the tees have been overseeded with bluegrass-fescue temporarily. He plans to commence with his bermuda program using perhaps a hardier strain of bermuda.

The fairways are a mixture of Kentucky bluegrass and Illahee fescue and are cut at 11/8 inches. A 10-3-7 80% organic fertilizer is used to supply 4 pounds of N annually. The first two years spring applications of 2, 4D and 2, 4, 5T were used to clean up the fairways and did an excellent job.

The K-31 fescue roughs were fertilized at 500 pounds 10-10-10 per acre plus a total of two additional pounds of N from urea to make it into the solid turf it is. The bunching usually associated with K-31 is not found in this vigorous turf.

The tees and greens are watered primarily by sprinkler from the lake by a 600 gpm pump.

DIRECTIONS

Take route 66 from the beltway and exit at Chantilly-Centreville Exit. Turn toward Chantilly, after 100 yards bear left on Braddock Road and continue on to the club.

PRESIDENT'S MESSAGE

by Thomas Doerer, Jr.

Now that we are approaching the fall season, we should look back and take inventory of our

accomplishments of the past season. What have we accomplished other than the normal maintenance routine we do from season to season? What labor problems have we had this season? Have we encouraged a training program for our employees? Have we screened them for permanent positions with the club? Have we increased their living standards? Have we established an incentive program through increased wages, fringe benefits, etc. the same as industry does for their employees; or are we going into next year with the same old problems facing us? Have we set up a long range improvement program, one with some continuity? Have we given some thought to increasing our machinery inventory? Are we amortizing our equipment? Have we given some thought to improving our maintenance areas so that we can work more efficiently next season?

I am sure that most superintendents have thought about all of these suggestions. However, in my visits to many clubs this year I noticed a few clubs that could improve their courses by following a few of these suggestions. Wherever you see a disorganized maintenance area, under paid employees you will find a club that is going down hill. Many short sighted greens chairmen and club officials neglect these suggestions until it is too late and they have serious course problems. Then they push the panic button, usually this results in more confusion. Mother nature has no panic button, she just keeps rolling along like ol' man river. So be prepared, not disorganized. Set up a long range program with plenty of continuity to it and you can't go too far wrong.

Believe it or not, my conversations with several club officials prompted this message. Most of them concurred with the suggestions. Several chairmen felt that their clubs should divert more of their funds from non profit areas and put them to work on the course, which after all, is the reason for the club in the first place.

In a recent survey taken by the Middle Atlantic Golf Course Superintendents Association, relative to wages and budgets, we came up with the following figures. These figures may be of some value as a guide in your club programming.

Twenty-four private clubs answered this survey. Average acreage per 18 holes, 144. Annual maintenance budget - \$48,000.00 Annual capital improvements - \$5,970.00 Superintendent's salary - \$10,500.00 Assistant superintendent's salary - \$5, 135.00 Annual wages other than above - \$24, 380.00 Hourly wage rate for help - \$1.75 Mechanic's wages - \$2.50 Total value of equipment - \$38,600.00 Hourly rate employees average 44 hrs. per week. 14 reported they attended board meetings. All reported paid vacations. 20 reported they have greens chairmen. 13 reported expense accounts. 9 reported group insurance. 3 reported pension plan. 3 reported Christmas bonuses.

3 reported a house and utilities.

Actual cash value of insurance, expense accounts, etc. were not given so no cash average could be taken. Since each golf club is a personality, these figures will only act as a guide for your particular planning.

NATIONAL NOTES

by Bob Shields

Our Executive Director, Mr. Ben Chlevin, was in Pittsburgh the weekend of August 13 and 14 visiting with superintendents in that area and attending the PGA Golf Championship at Laurel Valley Golf Club at Ligonier, Pennsylvania.

Meeting with Ben on Friday, we had the pleasure of a social meeting with Warren Cantrel, PGA President, and past Presidents, Lou Strong and Harold Sargent. At dinner that night was Leo Fraser, PGA Vice President from Atlantic City, and Max Elbin, the PGA Treasurer from Burning Tree in Bethesda. We saw some very good golf and a beautiful golf course. Large greens with perfect surfaces, beautiful tees of bent grass cut with putting green mowers, fairways that gave a perfect lie every time on bent grass cut at 1/2 inch and sand traps that made one want to come home and start rebuilding his golf course. If you are ever in that part of Pennsylvania, it would be worth your time to stop in at Laurel Valley to see this course; or if your club wants you to make some major changes in your course it would pay them to send you there first for ideas.

The new GCSAA Membership Directory is in the works and all editorial copy and adds must be in by September 15 in order to have the finished product ready for mailing to you on October 15. The cost of the roster is borne by the commercial firms who advertise in the Directory so look over the adds carefully.

Joe Doan will come to work for GCSAA on September 7 as managing Editor of the Golf Course Reporter. For the last ten years he has worked with Herb and Joe Graffis as managing Editor of Golfdom magazine and we have long been familiar with his writing talent and his ability to work with superintendents. We look forward to a bright new future for the Reporter and for all superintendents as Joe gets into full swing. Some of his ideas, which we have already reviewed, really look good and you can expect some big changes in the contents and layout of our magazine.

PENN STATE FIELD DAY

The Penn State Turfgrass Field Day will be held September 15th and 16th, 1965. Registration at no charge will begin at 1:00 PM on Wednesday, the 15th and the program should begin at 2:00 PM; and continue at 9:00 AM on Thursday terminating at noon.

The turfgrass research plots are located off the north end of the Campus. Our program is informal in nature with a discussion of each area of research, followed by question and viewing periods.

VPI TURFGRASS FIELD DAY

This year's V.P.I. Turfgrass Field Day will be held September 8th and 9th at V.P.I. in Blacksburg, Virginia, at the V.P.I. Golf Course. Registration on September 8th will be from 9:30 to 10:30 AM E.S.T.

The first day's program will be similar to last year's with the exception that more time will be allotted to looking at the equipment displays and experiments. On the second day, there will be a tour of some of the department facilities such as the growth chambers and the soil testing laboratory. Following this tour, there will be a meeting of the Turfgrass Council which will be open to anyone. This meeting is expected to be over by noon.

BENTGRASS GREENS IN THE TRANSITION ZONE - Part II by James E. Thomas After having completed construction, drainage, soil mixing, and planting; we will assume that the area has successfully been brought into play. Its upkeep has now become our concern. At this point as a preface for what is to follow, I quote from the Sports Turf Bulletin of Bingley, Yorkshire, England - "THE IMPORTANCE OF TIMELINESS". "For the best results, turf requires the right treatment at the right time. Our advisors can recommend the right treatment and indicate the approximate time for carrying it out, but the success of any treatment depends on the skill of the man on the spot in picking exactly the right time for it. The importance of the timeliness factor is not sufficiently recognized by many people. For every single operation in turf production and management it is possible in most years to pick just the right conditions."

Good maintenance and management practices must go hand in hand, along with proper construction or the entire program will be a failure. Some of the principal pitfalls and trouble makers we need to guard against are built-in-headaches brought about by faulty construction, design, and poor specifications. Let's review a few of these built-in-headaches and the resulting maintenance problems they can create for us, the big three are: poor drainage, both surface and internal; improper soil mixtures; and failure to provide sufficient air circulation around tee and green sites. These three faults can bring about conditions favorable for disease, dead grass, shallow root systems, and suffocation of grass plants due to the shortage of oxygen in the soil profile brought about by an oversaturated soil condition generally lacking in good drainage and percolation.



All of the above causes and results contribute to one of the most serious plagues a golf course superintendent has to contend with in the management of bentgrass putting greens. Namely, summer wilt. Wilt can easily be classified as a number one killer of fine turf. Some will contend properly managed turf should not be subject to wilt. Their remedy is to just syringe with a fine spray once or several times a day on hot sunny days. This places the damage for wilt squarely on the shoulders of the turf manager. Yet, in many cases this can be very unfair and unjust, as there are many contributing factors to this summer malady of turf.

The Mamlon Company, manufacturers of horticulture chemical products, New Haven, Connecticut, issued a bulletin in 1954 containing some very pertinent facts and observations on the subject of wilt. They are worth reviewing, some of the extracts are: "Wilt is not always due to wrong cultural practices, nor is it easy to prevent wilt, as it often occurs on well managed putting greens. It can happen very suddenly and unexpectedly. There are not easily recognized symptoms to warn of an impending attack. Yet, there are certain climatic and weather conditions that tell us when turf may be susceptible to sudden wilt. Knowledge of these conditions and close observation on our part can help us to prevent it from happening. Alertness is needed when hot dry weather exists, especially so when it is windy and the humidity is low.

Turf wilts due to the lack of water. The supply of water in the plant cells is lost by transpiration, and must be replenished to sustain life in the grass plant. If the transpiration rate is greater than its replenishment the supply of water in the plant cells drops to a critical point, and then the plant starts to wilt. Wilting if not checked progresses to where the cells shrivel or dry up and the plant succumbs. It can happen very quickly to shallow rooted turf on a day that is hot, dry and windy.

The most common and indirect cause of wilt is - not enough or no water available to the plant. For a grass plant to absorb water, some part of it (blades, stems, or roots) must be in contact with water. This is especially true if turf is very shallow rooted, as the soil can be saturated with moisture only 1/2 inch in depth from the surface, but this does no good if the grass roots do not go down that far.

Other indirect causes of wiltare; a grass plant can be in contact with water and still not be able to absorb enough of it to take care of transpiration losses, since roots cannot absorb water without the presence of atmospheric oxygen. So, a grass plant wilts if the roots are flooded with water, and it dies because of suffocation due to the lack of air in the soil profile, in short it drowns. If over-saturated sod is walked on during periods of wilting, the blades of the grass are pressed into the water and become moistened. This moisture on the leaves of the grass sometimes is sufficient to sustain temporary life in the plant during the critical period of excessive evaporation. This accounts for the green footprints so often seen across a patch of brown turf.

The term scald has been used to describe many evils. It is a condition that exists on turf growing in compacted or poorly drained soils, and occurs after heavy rainfalls which are followed by bright sunshine, high temperature, and low relative humidity. Heavy artificial watering can create the same condition. A sunny afternoon following a period of heavy rainfall or heavy watering, and accompanied by high temperatures is often a danger signal of trouble ahead.

The remedy for all causes of wilt is the same - apply water at once when it is noticed. When conditions conducive to wilt are known to exist, then water should be applied to it before it starts. The amount of moisture to apply depends on the cause of the wilt. Grass that is wilting because of water bound roots needs only to receive a spraying with a fine mist, just enough to set up a film of moisture on the leaves. This needs to be applied frequently enough to halt the wilting. Weather conditions at the time will govern the frequency of applications. This same treatment applies to wilting turf with apparent optimum soil moisture and a good root system.

Shallow rooted sod that is wilting due to the lack of watering the root zone (and remember the root zone may be less than 1/2 inch deep) should receive just enough water to wet the turf to the depth of dryness. This can be determined by cutting into the sod with a knife. A keen sense of observation and a pocket knife are two important requirements in combatting wilt. When it is first noticed on turf, before applying water, the turf manager should first cut into the sod with a knife to determine the cause of the wilt. The basic thing is to first find out if the grass is shallow rooted or if it is only localized dry spots, then one should treat accordingly.

There are many reasons for the wilting of grasses, the most common are shallow roots. Such turf can and should be kept alive and healthy, it requires constant supervision and expert care. The depth of the root structure and weather conditions determine how often the turf should be watered to prevent wilt, and how often it should be fed to keep it healthy. When it is known that sod is very shallow rooted, it is a simple matter to treat it correctly and prevent the occurence of wilt. The greatest loss of grass usually occurs when the greenmaster is not aware of the shallow rooted turf in his putting greens, as the condition often builds up without warning and without symptoms, and can manifest itself very suddenly and unexpectedly. When discovered, treatment needs to be done at once, without delay, before it is too late and damage has resulted.

We must watch weather conditions and learn when to suspect and look for that first sign of wilt. This is not always as easy as it sounds. Each must learn the hard way by experience. The time for us to be on our guard is at the start of the summer. A tour of inspection right after lunch especially on sunny, and dry days is advisable. Periods of low humidity accompanied by winds often are a forewarning of an attack. An extended period of heavy rains and high temperatures can also bring about troubles not wanted or anticipated. July and August are the danger months, and after an extended rainy spell it is best to be prepared to start syringing greens, and this can become necessary after only a few hours of sunshine.

The transpiration rate is often influenced by atmospheric conditions or extreme dryness. A close watch should be kept as to: temperatures, relative humidity, and the degree of sunlight and air movement. When the weather man includes in the daily forecast "good to excellent drying" it is time to watch for wilt.

Sometimes it is difficult for a golf course superintendent to devote the necessary time to watch for wilt, when this is the case a few responsible workmen need to be taught how to recognize it. These workers should be instructed to stop whatever they may be doing at the first sign of wilt, and give the greens a light sprinkling. This may often result in some unnecessary watering, but is not a serious matter and can be termed as preventative maintenance. When there is reason to suspect wilt, one or two men need to be on duty on Saturdays and Sundays to tour the golf course and watch for any signs of occurence. A few dollars spent in this manner can be very good protective insurance.

As a final caution and summary: When bentgrass turf is known to be very shallow rooted or if there is reason to suspect it, one should not be lulled into complacency by what appears to be a cool day. The things to watch are winds, sunshine, and relative humidity, as a cool, dry and windy day can be more devastating than a hot and very humid one.

ATLANTIC NEWS Letter

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