

Florida's Turf Problems Are Increased by Rhodes Scale

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There are a great many important maintenance problems pertaining to every golf course. Some have more important problems than others. This is due to various reasons, such as poor topsoil, good soil not available in that vicinity. Also irrigation systems, especially the sources of water supply. Some courses or parts thereof are on land where fairway irrigation is not necessary, due to ground water table being fairly close to the surface. Each course has its own problems, and each expects the best maintenance possible for amount appropriated.

There are many important factors that enter into golf course maintenance. One of the most important for the Superintendent and the club in general is for close co-operation and understanding between the Grounds chairman and the superintendent. They should consult and each be familiar with all work that is to be done, especially with work other than regular routine work. Certain remodeling and renovating work is considered maintenance work. Very careful planning of such work weeks in advance of starting time will save the club considerable expense. In South Florida the most desirable time to do remodeling and renovating work is April to August. Such work started too late usually causes considerable extra expense in getting the course in condition for the winter season.

The greatest problem confronting golf courses today is to obtain a high standard of maintenance in the most efficient manner. The maintenance costs on many golf courses could be reduced if they had the proper and proven best strains of grasses for that particular vicinity.

Remodeling work on many courses would reduce the maintenance costs, providing only if such work is really given serious consideration by the club officials and the golf course architect. Maintenance problems should be considered from every angle on any changes or new work.

There are various reasons why remodeling work is done on golf courses. Usually the two main reasons are to modernize and for economical maintenance. Club officials should consider the latter one of the prime factors.

Some renovation work such as chang-

ing to a different kind of turf, particularly on operation is a costly and major operation. Good fairway turf kept in a good healthy condition will save considerable in maintenance expenses. The weed eradication work would be greatly reduced. Many southern courses have to fight weeds throughout the 12 months of the year.

Make Turf Tests

It is recommended that each particular golf course run certain tests of various strains of grasses to determine which is most suitable for their climate and soil. This can be done by planting small areas in fairways or on tees, and keeping such areas under playing conditions for at least a year.

Research by USGA Green Section and other agencies has been a great asset to golf courses. The research on growing better turf, also control of insects, and various fungus diseases greatly assist the clubs in choosing and maintaining turf.

Good equipment is necessary for efficient maintenance. The equipment manufacturers apparently are keeping pace with the times. Just think of the vast improvement in maintenance equipment during the past 20 years. The golf course superintendents are usually informed of most new maintenance equipment.

A few of the most important problems confronting golf course maintenance are listed and explained above. The writer would hesitate to state which he thinks is actually the most important.

In the present day of high salaries, high cost of supplies and the most important item of high taxes, it is necessary for each club to operate as economically as possible.

Need Wider Understanding

It is the belief of the writer that the present day golfers want and expect a high standard of maintenance on their courses. If and when the Grounds chairmen and officials of the clubs get the superintendents' accurate and sound view of the maintenance problems that are so urgent then a promising approach to the solution of the problems can be made and the golfers kept happy without allowing maintenance costs to run above the mini-

imum required for a satisfactory condition of the courses.

What often is not considered in course maintenance is that the problems involving men and money are more pressing and more frequently neglected than the problems involving turf maintenance. And often the problems of men and money in maintenance are more persistently baffling than the turf problems, although we always seem to have some troubles with turf.

Rhodes Grass Scale Trouble

One of the greatest maintenance problems south Florida courses have had to contend with during the past couple of years has been a pest that has caused considerable damage to turf on golf courses and lawns of many home owners. This pest is known as "Rhodes Grass Scale". A very bad infestation is known on at least four greater Miami golf courses, one of which is my club, Indian Creek CC, Miami Beach. The pest has also done considerable damage to golf course turf in the Palm Beach area.

This scale insect gave us great concern during late September and October, 1951. The damage was so severe during that period at Indian Creek that it was very doubtful at the time whether our greens would be ready for opening by middle of November. At that time, several of our tees, as well as many areas throughout the fairways, showed signs of destruction by the pest.

We tried about everything that was recommended. The insect specialist from Subtropical Experiment Station at Homestead, Fla., worked diligently on the subject. He is still trying to find a control.

Fortunately for our club the turf began to improve very rapidly about opening time and inside a few weeks our course was in excellent condition and stayed that way during the season. Careful records were kept on all treatments. However, we cannot definitely state what caused the turf to improve other than good weather conditions, fertilization and topdressing.

We tried different maintenance methods during closed season of 1952. An experiment was tried out during 1951 on a small plot in our nursery with the idea in mind to save considerable summer maintenance expense. The small experiment proved very successful as to turf condition.

Our golf course was closed for the season on May 11th. That was the last day our greens were cut with any type mower until September 15th. The only maintenance during the entire summer was watering about once a week during dry periods. The grass on our greens (Gene Tift strain of Bermuda grass)

grew very thick and was 6 in. to 10 in. tall when starting to cut back. The grass became highly infested with the scales during early summer. As the summer went on, the scales became attached to about every node on the stems.

When time came to cut the grass and prepare for coming season, we planned to dispose of the grass by burning. That we know was a sure way to kill the millions of scale insects. We then sprayed all the green surfaces which were almost down to bare ground with materials recommended by Dr. Wolfenbarger of Subtropical Experiment Station. We should know within a few weeks the results of our treatments.

This year to date we have had only a small amount of permanent turf injury. However, last year our greatest turf injury showed during October and November.

Many golf course superintendents and others who are interested in control of this pest seem to think it thrives during extreme dry weather. The years 1951 and 1952 have been extremely dry in south Florida. If that is one of the causes, here's hoping we get normal rainfall from now on.

A news story in Sept. 14 Miami Herald, from which excerpts follow, gives an idea of the extent and character of this new pest.

"A new pest is threatening South Florida lawns.

"It is a scale insect, known as Rhodes grass scale. It looks something like a mealybug and injures grass by sucking the juices from the stem.

"This scale was first noticed a couple of years ago on golf courses in the Miami area. Dr. D. O. Wolfenbarger, insect specialist of the Subtropical Experiment Station at Homestead identified it.

"Since then the pest has become widespread in both Dade and Broward counties. It is doing great damage, and many persons probably are fighting chinch bugs and fungus when the real culprit may be this scale.

"Injury from Rhodes grass scale shows up slowly. The first signs are irregular yellow patches. The patches grow larger. Individual grass runners begin to die. The lawn becomes thin in areas where big populations of the scale are at work.

"The individual scales are white, soft and cottony in appearance. Look for them in clusters on the stems of grass.

"None of the insecticides tried so far have much effect on the scale. Not even parathion gives control.

"A representative of a large fertilizer and insecticide firm, Clint Brandon, wrote to The Herald farm and garden editor

that he had found the damage from this scale to be widespread in Dade and Broward counties.

"I find that many of the lawns I check could not possibly be reclaimed due to such heavy scale infestation," Brandon wrote. "I spend a considerable portion of my time checking lawns, golf courses and other grass areas in Dade and Broward counties. I have found extensive scale infestation in every town in these counties."

"The Rhodes grass scale, in my opinion, will eventually eclipse chinch bugs in importance as a lawn pest in South Florida. Insofar as is known, there is no control, other than a parasitic insect."

"The scale probably is normally attacked and kept under fair control by other insects, which live upon it. But these beneficial insects are being killed off through the use of strong insecticides in the fight against chinch bugs and mosquitoes. And the scale, which is not bothered by the insecticides, is having a field day with none of its enemies around."

"The scale was first found on Bermuda grass. But the scale doesn't seem to mind whether its diet is Bermuda or St. Augustine grass."

"So far, the insect hasn't been reported on centipede or zoysia. That doesn't mean that it will not attack these grasses. Nobody has reported seeing the scale on them."

"While making his initial study of the Rhodes grass scale, Dr. Wolfenbarger also found another scale at work. It is known as Ruth's scale, but it isn't as widespread as Rhodes grass scale."

Why Course Labor Is Scarce

By BERT H. ROST

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The most important problem that faces golf course maintenance today is salaries to attract and hold good men. Normally, we have a crew of five men the year round. Some of our time is spent in cleaning and painting the interior of the clubhouse, dormitory and other buildings in the winter.

Two years ago we lost two men, one from death and another was past 70 and didn't feel he could work steadily any longer. Therefore, we advertised in two publications recently. Our returns were very gratifying and I would say we had about 12 men answer the advertisement, most of them between 30 and 50 years old. Three of them had been raised on farms and were at present working in factories, but would like to do outside work. After asking them a few questions pertaining to their qualifications, of course, the next thing discussed was salary; ours is on a par with most other

clubs in the district. This usually ended the interview in a minute or less. Some went a little further to ask if we had a Health or Hospitalization Plan, Pension fund, overtime for time over 40 hours. Most clubs do not have these to offer; 2 weeks with pay, yes, but that didn't seem to offset the disadvantages they found. We at present have two men who are trying us out.

It is a known fact that it is almost impossible for country clubs to obtain group benefits for their employees because of the large turnover of employees, but most of these are in the clubhouse and not on the grounds. Some clubs have set up benefit funds which appeal to men who like golf course work and would be an asset to a club organization.

At the present, the golf course superintendent has to operate on a skeleton crew until the boys get out of school, June 1st, which is far too late in the game. The time for most work to be done on a golf course is April, May and September until it freezes in the fall. They are the cool months when reconstruction and planting and trimming can be done. If adequate labor is available in these months, the course has a good chance of being in good condition during the months of heavy play. I believe the all successful clubs have found that it pays to hire and keep good key men who can and will do several duties at a club.

As for the turf problems of the past season, they have been a culmination of weather conditions which have come about during the past three years. 1950 and 1951 were both summers with plentiful rainfall, therefore a shallow root growth on turf, along with plenty of snowfall in the winter (a record in 1951) therefore no frost action in a heavy soil as we have in the Chicago area. In April, 1952, hot dry winds that almost desiccated many shallow-rooted grasses, left turf in a weakened condition to be followed by the hottest summer on record in the area, which affected turf that was weak, although it had a good color from fertilization but not the root system to carry it through such a period of far above normal temperatures.

The Midwest golf course superintendents know that we do not have all the answers to our problems, therefore we have submitted to the University of Illinois a complete plan for a Turf Research and Experimental Area to be established at the University of Illinois Drug Plots and Horticultural Station at Lisle, Ill. So far we have had little response to our efforts from the University. This is a project that would be highly beneficial to all home owners in Illinois and needs a big push from everyone interested in turf.