

How Greenkeepers Wrestle With Today's Maintenance Problems

By T. H. RIGGS-MILLER*

THE EVOLUTION of the modern golf course is quite recent. Few years have passed since men thought golf had to be played at the seaside. Many of the early links were formed by nature adjacent to the sea by the alluvial deposits of rivers, near where they ran into the sea.

*Address at New Jersey maintenance conference.

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There are a number of outstanding links of this type in England and Scotland, among the best known are St. Andrews, North Berwick, Sandwich and Westward Ho! The first inland golf courses were considered more or less as makeshifts, but it was soon learned that as fine a test of golf could be made on a course as on a links, which brings us to the meaning of the two words so misused. Links refer to a natural seaside course, while a golf course refers to an inland course natural or artificial. It is the preparation and subsequent care of inland courses that has brought about such an abundance of theories, conflicting viewpoints, scientific investigations and incidentally, has given greenkeepers jobs.

The first course to be designed by a golf architect where greens and tees were built up and ground prepared, fertilized and seeded in the way we do it today was Sunningdale near London. This was in the year 1900, so modern golf course construction is only 32 years old. I might add that any inland course previous to this date was built on existing pasture lands, which were mowed and fined down for the purpose.

Today there are golf courses in every country in the world. In the United States alone they number nearly 6000, and yet I don't believe it possible to find six constructors or greenkeepers who use exactly the same methods! In other words, there is no "school" of construction and greenkeeping. Generally speaking, every other trade, profession or art has a specific mode of procedure. Their system or technique of tackling a given problem differs very slightly over the length and breadth of the country. I can see no reason why the procedure of building and maintaining golf courses cannot be made more or less uniform.

The technique or method of procedure has nothing to do with topography, climate or soils, or with topdressing greens, from the making of the compost to working it in

the greens, or with mowing fairways, or with the construction of a green or tee. There must be a "best" method of performing the many and varied tasks on a golf course which would apply to any course anywhere, and it is only with the greenkeepers' exchange of ideas with one another that a unified attempt to gain greater efficiency from men and machines can be made.

Looking for the Right Way.

For instance, Mr. Roth of Plainfield, N. J. has worked out one of the best systems of cutting fairways that I know. Some other greenkeepers will have efficient methods for topdressing. Whenever a better method presents itself it would be well to try it out, and to give credit generously where it is due. Men are always ready to depreciate the line of conduct known as "cut-and-dry"; but successful management in any business is exactly that. It is cutting of one's material according to a plan, and a tentative assembling of the pieces. It means the setting aside of preconceived notions and fixed ideas, the elimination of waste of both materials and labor, the selection of machines and equipment, the arrangement of service buildings, handling the golf course, the operation of machines, and a hundred other details. The thought uppermost in the greenkeeper's mind is to find the best and cheapest way to accomplish a piece of work and provide means of doing it in this fashion. A man succeeds in the process directly in proportion to his understanding of his problems.

This leads us to the outstanding question of maintenance costs on golf courses, which is less than it has been at any time in the history of golf in America, and has been brought about by the cooperation and understanding by greenkeepers of their problems, reductions in wages of both greenkeepers and men, and the potential saving in labor made possible through the development of machinery by the manufacturers whose business it is to keep pace with the necessities created by the demands of golfers. A great number of these devices and improvements in machines were created by the greenkeepers themselves.

Cost Comparisons Impossible.

In talking of costs, one of the fundamental mistakes made by critics is the comparison between courses. Although a great deal can be done by developing uni-

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form performance on golf courses, there will never be a time when a fair comparison of costs between them can be made, unless all golf courses are built identical.

Physical differences of terrain and construction are important. It will be admitted that the major task on a golf course is mowing grass. The greater area it is possible to mow with a tractor mower whether it be 3, 5 or 7 gang, thus reducing hand mowing as far as possible, the lower the cost of this major item.

Any obstacles that interfere with the capacity functioning of a tractor-drawn mower such as artificial banks on tees, greens and bunkers so steep they must be mowed by hand, will have to be eliminated before real economical maintenance can be secured. A very good example of this artificial type of construction may be seen on the lower course at Essex county, where the amount of hand mowing and even scything necessary is appalling. A comparison of costs between this, and a course where the banks are well drawn out to allow a tractor to cut them completely would be unfair. The number and size of bunkers and the degree of refinements demanded also vary with every course. Thus, each greenkeeper's problem is individual and the ingenuity that he shows in mastering them denotes his worth.

Plan Ahead.

By making a careful examination of your course it is surprising how many steep banks can be eliminated even with a limited upkeep gang. It simply requires planning ahead. The results of careful planning ahead will excel those of deciding each night upon the plans for the next day. The latter arrangement means haphazard management. Begin a job properly and it is much easier to take it through to completion and to start off the second and third jobs.

Planning is, the highest test of a greenkeeper. It is not bound by precedents, it may be revolutionary, but it must consider only one thing. . . . **YOUR JOB.** These words must be written in capital letters. It stands at all times for the golf course where the ideal is to obtain the greatest efficiency from funds available. Planning of jobs cannot be done to best advantage unless those responsible have an intimate knowledge of a golf course plant—information about all kinds of machines and their adaptability, the rating

of laborers, weeding out of drones and establishing a specific goal.

A great deal can be said about small tools, such as shovels and rakes. In order to do good work good tools are necessary. Shovels should be lighter than those used on road work, with wooden D handles; handles of all other tools should be nicely finished off and well balanced.

The service building or barn is the beehive of golf course activity. Any money spent on properly housing expensive machines and providing facilities for prompt and proper repairs will pay the club handsome dividends. If it be large enough to allow screening and preparation of compost it will pay for itself still more.

Problems of Plagues.

Apart from the actual management of the golf course equipment, the greenkeeper has to fight as many plagues as existed in Egypt, which he inherited when golfers transferred their divot digging from seaside links. Whereas rabbits and sheep were the mowers and the sandy soil and salt air were the disease protectors of links, an entirely different problem was faced when turf grasses took on a fleshy prolific character in the heavy soils of their new surroundings.

I remember in England in 1911 applying 1 lb. of arsenic and 1 lb. of lime mixed with 50 gallons of water for white grubs, and a copper sulphate solution for leaf spot. So don't think that all these diseases were caused by the Green Section.

To expect a greenkeeper at a plant valued anywhere from \$100,000 to \$1,000,000 to prescribe accurately for every ailment, to work out an hydraulic formula for a water system, to design and build new golf holes, and to build roads and bridges, is foolish. The greenkeeper who tries to hide his lack of knowledge on some highly technical subject is still more foolish. A greenkeeper who has a practical working knowledge of golf course routine, fertilizers, seed, equipment and ordinary diseases and their antidotes, who handles his men and materials economically and is constantly on his job and above all knows how to obtain information on other subjects when it is needed is a clever greenkeeper.

Course's Family Doctor.

To suggest that there is an analogy between a greenkeeper and a family doctor will be ridiculed by many, but on close analysis it will be found that the likeness

does exist to a very marked degree. The function of a family doctor is to diagnose his patient's ailments and apply remedies the specialists in various diseases have found through experience best for curing particular ailments. When it comes to a major operation, the family physician does not do it himself but recommends a surgeon whom he has found to be the best for

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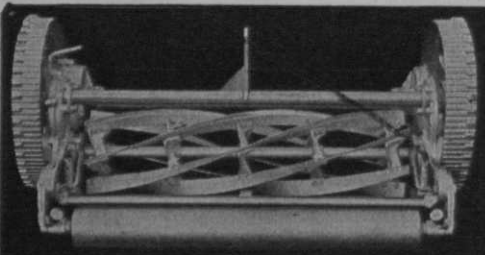


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that particular branch. When the operation is over, the family doctor nurses the patient back to health. If an analysis of blood, excreta or urine has to be made, even though the doctor has the experience and ability to make them, he generally sends them to a laboratory to have them made, so that his time will be free to attend his patients.

The family doctor who does not keep himself well informed on the latest discoveries through attending lectures and conferences and reading the various medical journals is not only stunting his own mental growth, but is depriving his patients of a service they have a right to demand.

The greenkeeper is truly the family doctor of the golf course. He analyzes its ailments and attends to its wants. If a major operation such as the installation of a fairway watering system is contemplated, he knows the engineer who has been successful and recommends him. When the lines are back filled, he nurses the wounded sod back to health.

If he wants to have specific information on some new disease, he has at his disposal all the research work that has been made not only in Washington, but at New Brunswick, and other places where he can make full use of it. If he wants to check his own analysis or is too busy to make them he can use the services at various establishments. One only has to read of the hundreds of thousands of yellow fever victims before medical research showed that the fever was caused by a mosquito, to realize what work of this kind really means. The experiments and research work at New Brunswick are just as vital to greenkeeping as the Rockefeller Institute is to medicine. Every club in Jersey should support the service which the experiment station is offering, the funds of which help to provide for its continuance. I know that I am expressing the sentiments of each and every member of our organization in congratulating the faculty in charge of this work.

Like any other business enterprise, interest and taxes are heavy burdens to golf clubs. This together with the shrinkage of memberships and income make it well nigh unbearable. Time is needed to adjust club finances. In the meantime strict budget control must be enforced. The satisfaction of adhering to intensely business-like arrangements cannot be over-estimated, more especially after a period

when the spending of money was uncontrolled, as happened these last few years.

Depreciation Neglected.

Greenkeepers who have kept any kind of cost data will have an advantage in making up their budgets. One very live factor is seldom included in budgets and that is depreciation. Depreciation occurs as a result of wear and tear due to active use, physical depreciation, neglect, inadequacy or obsolescence. (The time depreciation hits us most forcibly is when we turn in our old car).

Ordinary wear and tear of buildings and equipment is largely compensated for by current repairs. Depreciation, however, is only retarded and not stopped by repairs. A building may be made to last for centuries, but it will eventually fall into decay if continually used. A machine eventually gets to a point where it is cheaper to scrap it than repair it. Depreciation must therefore be figured on plant and equipment. The rate of depreciation depends on its durability, which is affected by the severity of its work. There are several methods of reckoning the rate of depreciation. The money laid aside for depreciation is placed in a sinking fund in order to replace discarded and worn out equipment. It is a legitimate charge and should be included in all budgets.

Can the present economic program be carried out without detriment to the golf courses? It can by the close cooperation of department heads for the common cause. By eliminating overlapping duties, and plugging leaks money can be saved. There might be some service the greenkeeper can render the clubhouse manager that would save money over the present system. In order to attract members and guests to your course, vital requirements

such as fertilizing and seeding can be included in any budget, however slim. The greenkeeper's first line of defense is good tools and equipment without which true economy is but a dream.

Beware the Phonies.

In times like these, chairman of green-committees should beware of quacks and nostrums. People who are seeking to capitalize on their schemes during clubs' financial stringency by making very flowery offers to maintain courses at ridiculous figures, which might lead the chairmen to look with suspicion on the budget submitted by his greenkeeper, a man who knows every inch of property.

Speaking for greenkeepers in general and New Jersey greenkeepers in particular, it would be hard to find a finer group of men in any industry. They are loyal and devoted servants to their clubs. When the members of New Jersey Greenkeepers' organization meet in a body, as they do each month, they represent a combined experience of over 500 greenkeeping years, which they give wholeheartedly to the cause.

ROXY, New York movie showman, has 50 sets of golf clubs. Jim Blose, Ohio left-hander, has 30 sets. A Kansas City (Mo.) golf nut bought 25 sets from one manufacturer for his personal use during 1931. When he scored poorly he gave his clubs to his caddie. Other manufacturers are wondering how they can work up customers to such a temper.

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