

Fairway Watering Benefits Show Need of More Study

By C. E. Stewart

A thoughtful and informed re-examination of the fairway watering situation is in order these days. Tremendous advance has been made by course superintendents in the effective and thrifty operation of watering systems designed and constructed to fit the needs. That achievement has not been recognized or studied sufficiently.

Watering, like almost every other detail in developing and maintaining excellent turf for golf, requires study of complex problems. Judging from the results as shown in turf vastly improved over that of the pre fairway watering period it is obvious that superintendents have solved most of the complex problems involved. Yet some problems remain that baffle the experts and probably will continue to do so for some time as conditions at test plots do not lend themselves as well to the solution of fairway watering problems as to other research.

However it is conclusively evident that the players want the benefits fairway watering has brought to golf turf and to the game. It also is quite plain that fairway watering has been such an encouragement to play that added income due to it has accounted for increase in club patronage and revenue making the fairway watering investment one that not only has paid for itself but been a substantial factor in financing other improvements and expenses of first class club operation.

Blind Spot in Scientific Research

It is not a scientific long-range attitude to criticize fairway watering for errors that have been made during the work that course superintendents have had to conduct for themselves in determining correct fairway watering procedure. This the superintendents have had to do in the absence of test plot or laboratory work adequate to supply needed information.

Watering has been worked out on a basis of grass need, soil conditions, weather, other maintenance practices and player convenience in a way that represents one of the distinct phases of progress in course maintenance science.

Correct fairway watering provides the amount of water required to achieve the results that would be obtained by ideal distribution of rainfall. Possibly one year in 10 rainfall may be distributed throughout the playing season at intervals and in quan-

ties to assure maximum development of the type of grass best suited for fairway use. But that one in 10 chance as determined by course superintendents' observation and long-range records isn't satisfactory to the players or conducive to growing the fairway turf a first class golf course requires to maintain competitive status with other clubs.

Courses Deteriorate Without Watering

One may hear that fairway watering in keeping a course green and the ball in good lies encourages the growth of clover, poa annua and some other weeds. Expert superintendents who have worked out proper watering procedure have fairways that are proof to the contrary. Something may be wrong with the coordination of fertilization, weed treatment and watering when there is continued growth of undesirable plant life but the water is no more to be blamed than any other factor. The proof of that lies in numerous demonstrations in which the use of fairway watering was discontinued. Those fairways, after treatment to eliminate weed infestation, were not long in returning to weedy condition. Weeds thrive without water but desirable fairway grasses in common use today need water in amounts and at times rarely filled by natural rainfall in most sections of the U. S.

One of the impressive demonstrations of the value of fairway watering has been made since 2,4-D has come into extensive use. The 2,4-D has done an excellent job of eliminating certain weeds but areas thus cleaned quickly are reinfested unless there is provided a condition most beneficial to filling in the bare spots with surrounding desirable grasses. Proper combination of watering and fertilization supply factors essential to growth of thick, clean turf. The lasting results of 2,4-D treatment on watered fairways compared with the necessity of retreating unwatered courses after a season or so show how essential watering is to a well groomed course.

Courses for Players First

What the course superintendent always has to bear in mind is that the golf course is made for players and not for grass. According to some theorists apparently golf course maintenance practices should re-

verse the existing situation. Plant life that would do best on the course soil and under the weather conditions of the area should get everything its own way so the theorists propose and the players would have to be content with the result. There then would be no need for course superintendents and any grass or weed doing well with whatever nourishment it could get from the soil would be the turf to have.

Such unnatural forcing of growth, retention of color and close and frequent mowing as greens get would be taboo under that sort of a turf program. It might be fine for grass and weeds that could survive under harsh and uncertain natural conditions but the course would become a cow pasture.

On the baked soil of midsummer the roll and the bounce of the ball would discount all the genius of the architect and there would be so few problems for the course superintendent or other turf expert while the grass and weeds were growing without control anybody who could mow greens or fairways would be amply qualified to maintain a golf course.

Giving Players What They Want

That *reductio ad absurdum* of the "natural growth" condition on golf courses would mean the ruination of a larger part of the billion dollar investment U. S. golf clubs have in their establishments. But the players wouldn't stand for it. The players have been responsible for the introduction of fairway watering and as they insist on turf culture for their requirements the superintendents have effectively used that control of water to give the players what they want and pay for.

The turf experts still have plenty of work to do in helping superintendents to arrive at fairway watering practices that will keep the most desirable golf grasses healthy and in attractive color and compact for the longest possible period of the year. The required research is being made more urgent by the USGA Green section's advocacy of bent grasses in fairways. The bents need more water than other fairway grasses if they're going to provide the sort of lies players want and have vigorous growth to heal quickly over divots.

Much more study also can be done, under practical operating conditions, on the coordinating between fairway watering and fertilization in making fertilizer most effective under various soil conditions. Mere reference to fairway watering leeching away fertilizer doesn't indicate any primary fault with fairway watering. It may mean the watering operation is incorrect in amount and frequency. It may also mean the fertilizing program has not been effective and the watering program has been made the scapegoat.

Further indication of some confusion about the function of fairway watering lies in the conflicting statements about watering leeching away fertilizer and water necessitating more mowing. In the same voice are the complaints that fairway watering prevents the grass getting most good out of fertilizer and fairway watering accounting for such abundant growth of grass it must be mowed oftener.

The foregoing contradiction is an exhibit of the lag of research in fairway watering application behind the numerous excellent and valuable contributions of turf scientists in other phases of golf grass work.

The engineering in fairway watering has made pronounced advances and will show still more when pipe becomes available for installation of a great number of modern fairway watering jobs. The course superintendents have done their own practical work in determining how to best use fairway watering. The results obtained by studious superintendents accounts for the best quality of fairways and rough for players of all degrees of skill. But, as revolutionary and vast as has been the improvement of golf turf with fairway watering there is reason to believe that the advance will be even greater and even more pleasing to the players when the turf scientists apply their capacities to making greatest possible use of the potentialities of controlled watering.

Players who pay today's bills wouldn't be satisfied with the pre fairway watering type of turf that was on most American courses. And as long as they are paying the bills at the private, daily fee and public courses, their constantly rising demands must be met with complete and correct use of golf course watering systems.

CLUB OFFICIALS ASKED TO AID GREENKEEPERS' UPKEEP STUDY

Medical men find it necessary to attend short courses and conferences to keep up in their profession. School teachers attend normal courses to gain the latest technique in education. If it is necessary for people working in as old and well established professions as these to attend refresher courses it is evident that one working in a new and rapid developing profession such as ours should take advantage of every opportunity to secure the latest information on turf management.

Mr. Chairman, a well informed greenkeeper is the best road to better course maintenance. Encourage your greenkeeper to better qualify himself for his duties by attending short courses and greenkeeper association meetings. This is the best insurance of a properly maintained course.

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