

# Fall Fairway Fertilization for Full Season Results

By B. R. LEACH

"Is this train ever on time?" growled the grouchy passenger.

"Oh," replied the conductor, "we never worry about it being on time. We're satisfied if it's on the track."—Wall Street Journal.

ASK the average greenkeeper what he would like to have in the shape of an increase from his club and the reply would in all probability be as follows:

1. An increase in salary (a substantial one, say \$10 per week).

2. An increase in the amount of fertilizer for the fairways.

Oddly enough increases in both of the above items are equally as scarce if we consider golf clubs as a whole.

"Increase in pay!" said one of my greenkeeper friends in the Philadelphia district recently. 'Great guns, I haven't had a boost in my pay since the second battle of the Marne, and I only got it then because I had a fat job all lined up in the shipyards.'

"And when it comes to fertilizer for the fairways of this tinpot cow-pasture that the members insist on calling a sporty course, why when I even think about it my neck gets so hot that I can hear my celluloid collar fairly sizzle." The fairways of this crab grass paradise have had virtually no fertilizer since the Spanish-American war."

"In January a year ago they promised me \$2,000 for fertilizer and work on the fairways. Did I get it? I did not. The chairman spent the jack for an asphalt parking place."

"Again this spring," continued my irate friend, "they gave me the same line of bull, but along in April they got in a gang of fast talkers, and then what was left of my fertilizer money went into the building of a blankety-blank rock garden. There it is over on that slope. All you need is a six inch rattlesnake on one of those stones and you could imagine yourself in the wilds."

That the above instance of a greenkeeper's resentment at the starving of his fairways is far from being unique is evidenced by my experience as a consultant when a golf club would pay me a fat fee for advising them on the subject of grub control, and every other little thing they could think of on the spur of the moment.

On my arrival at the club the greenkeeper and myself would take a walk around the course, and the conversation would go something like this:

Greenkeeper—"What do you think of the fairways?"

Me—"Lousy."

Greenkeeper—"Ain't it so. Tell the chairman about it when he comes this afternoon."

Me—"O. K."

Greenkeeper—"O. K."

Me—"What kind of fertilizer do you prefer for fairways?"

Greenkeeper—"Right over here is a small patch I treated with Spivins Non Plus Ultra brand last fall. It sure does put pep in the grass."

Me—"Spivins is good stuff and the price is right. How many tons do you need?"

Greenkeeper—"I ought to have 20 tons. Tell the chairman to buy 40 tons. He is tight and will cut your estimate in half on general principles."

Me—"O. K."

Greenkeeper—"O. K."

Whereupon we adjourn and have a drink of ginger ale. That afternoon I meet the chairman, who proves to be a retired corset manufacturer. He reads my stuff in GOLFDOM and considers me two or three cuts above the common herd. I tell him that he has a wonderful course, whereupon he swells up like a poisoned pup. I casually intimate that the fairways are about ripe for a good shot of fertilizer in order that there may be no let down in the fine course condition. He affirms that he has been thinking the same thing himself (which is, politely, romancing). I suggest that 40 tons of

Spivins would be about right. He thinks that 40 tons would be more than they can stand right now, but they will certainly buy 20 tons. All of which is simply added proof of the old adage that greenkeepers, in common with all other poor mortals, are rarely prophets in their own balliwicks.

### Fairways Need Help

At any rate the fact still remains that golf clubs in general are still spending too much money for grass seeds and not enough for fertilizer in respect to fairway management, although the trend is slowly changing in this regard, due mainly to the steady hammering of the turf journals and fertilizer companies, whose efforts are bent on educating the clubs to appreciate the futility of sowing grass seed on fairways so poor that they are unable to maintain the thin stand of grass already present.

Since the annual application of fertilizer to the fairways is steadily increasing in this country there are certain pertinent facts which may well be considered at this time.

1. The experiment stations and turf research organizations have a pronounced tendency to consider fertilizer purchasing from the price angle. They will tell you, for instance, that in fertilizer A, a pound of nitrogen costs 19 cents while in fertilizer B it costs only 17 cents. Consequently they will tell you that fertilizer B is the best buy. Maybe yes, maybe no. Price does not always tell *all* the story of a fertilizer, especially when it is to be used for a specialized purpose such as fairway treatments. Maybe the nitrogen in fertilizer B is quick-acting and won't stay with you over a growing season, while the nitrogen in fertilizer A is slower acting and *will* stay with you throughout the season. Common sense dictates the answer that fertilizer A at 19 cents per pound of nitrogen is a cheaper buy than fertilizer B at 17 cents per pound of nitrogen when you consider the labor cost of repeated applications throughout the season of small quantities of quick acting fertilizer B.

2. When I apply fertilizer to fairways I want to apply something which will keep the grass up on its toes for the entire season, thereby doing away with the necessity of additional costly applications of fertilizer at intervals of 30 or 60 days. Applications of fertilizer at short intervals is o. k. for greens because the area

is small and the labor cost relatively unimportant, but such is not the case with fairways where we are dealing with acres rather than square yards. For this reason I want to get the fertilizer on the fairways and be done with them for another year.

### A Long Pull for Fairways

3. In order to confine fairway fertilizer treatments to one each year it is essential that the fertilizer mixture be a sort of long pull mixture rather than of a flash-in-the-pan makeup. Such a long pull mixture should contain some quickly available nitrogen, usually of an inorganic form such as ammonium sulfate, but the great bulk of the nitrogen in the mixture should be in an organic form since this form of nitrogen is slower in its action, is gradually made available to the plant and thereby carries the grass along until the end of the growing season.

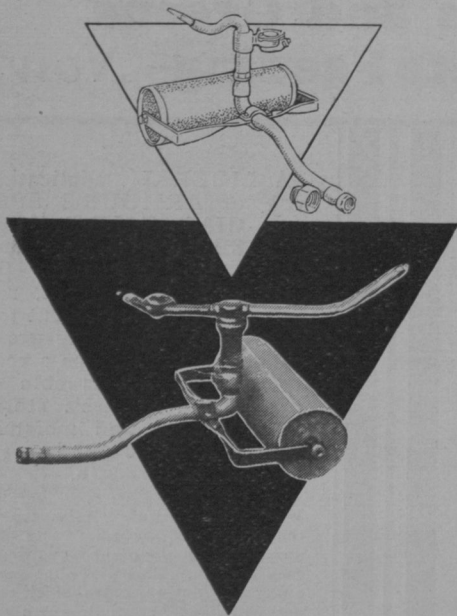
With this sort of a balanced mixture the quick-acting, inorganic nitrogen gives the grass a kick in the ribs and makes it push up a heavy green growth early in the spring when the ground is cold, at which period the organic forms of nitrogen are inclined to be very sluggish. By the time the ground has warmed up the inorganic nitrogen has shot its wad; the warm soil then begins to act on the organic nitrogen and the grass gets the additional food as needed throughout the remainder of the growing season.

The long pull fertilizer mixture should also be adequately supplied with phosphates and potash in order that the nitrogen of the mixture may be adequately supplemented and reinforced by these two necessary ingredients.

4. I do not propose to discuss any specific mixture formulated along the above lines or the amount that should be applied per acre. These are questions which had best be carefully discussed with your local dealer and the service departments of the various sound fertilizer companies catering to golf courses. Conditions differ so greatly in the various sections of the country that blanket recommendations are absurd, to say nothing of being dangerous.

5. If you plan to buy the various ingredients of this fertilizer mixture and mix them yourself, o. k. I mixed five tons of fertilizer on one occasion and the Madam made me sleep in the barn for three nights, until the odor dissipated somewhat. It is my personal opinion that the place to mix fertilizer is in a fertilizer

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factory where they have the proper machinery to insure a perfect mix, a condition very difficult to secure when a shovel is employed as the mixing agent. For this reason I prefer the mixed fertilizer every time, mixed all ready to dump into the spreader. Furthermore, I prefer high grade stuff. One ton of 10-8-6 is preferable to two tons of 5-4-3, first because one ton of the former costs less than two tons of the latter since it costs just as much to manufacture, handle and bag a ton of cheap stuff as a ton of good stuff, second because there is a saving of 50 per cent in freight and lastly because there is only half as much bulk of material to handle in the actual spreading operation on the course.

### Fall versus Spring Fertilization

There seems to be a decidedly firm conviction in golf circles that early spring is the time to apply fertilization to fairways. As a matter of fact early spring is a good time to carry out this operation but it most certainly is not the only time in the year when fertilizer can be applied to the fairways with success, in fact there are many sound reasons for doing this job in the late fall rather than early spring, the actual application of the fertilizer being time for that period between the cessation of grass growth and the freezing of the soil. This period varies in the different sections of the country, but in the vicinity of Philadelphia it usually runs from November 5th to 20th.

At this time of the year the greenkeeping staff has more available time in which to carry out a major fertilizer spreading job than it ever has in the spring when there are a thousand and one things to do and half enough time to do them in.

Furthermore, unless there has been an unusual amount of rain, the fairways in the late fall are firm and it is much easier to get around with the spreader without mussing up the turf. This is especially true in heavy clay soil areas which dry up slowly in the spring, but are firm in the average fall season.

However, the most telling argument in favor of fall fertilizer treatments of the fairways consists in the fact that by doing so you get a quicker *kick* out of the fertilizer during the early spring months.

This fact can be readily proved by treating a patch of fairway with fertilizer in the late fall and treating a patch alongside it with the same quantity of the same fertilizer in the spring. The fall treated

plat will be ahead of the spring treated plat from the day the ground thaws. This condition is especially noticeable on the heavier soil types, which are commonly spoken of as cold or late soils, that is, soils which are slow in drying out in the spring. All soils, light or heavy, respond best to fall fertilization but it is most noticeable on the heavy types.

The reason for this quick reaction in the early spring of grass which has been fall-fertilized is due to the fact that fertilizer must have time to act. When applied in the late fall it is dissolved and carried into the soil by the fall rains so that by early spring it is down around the grass roots all ready for the grass to grab it and make a heavy green growth thereby. When fairway fertilization is delayed until spring the chemical must still be acted upon by the rains before it can get into the soil and be taken up by the grass roots. All this results in the loss of that early grass growth with the result that the heavy, green growth in the early spring is delayed.

In all probability many golf clubs fail to practice fertilization of the fairways in the fall due to the low condition of the club treasury at that period when the fiscal year is drawing to a close, whereas, on the contrary, flush condition of the exchequer in the early spring prompts the purchase of fertilizer at that time. It would be good business to reserve a certain amount of money at the beginning of the year for the purchase of fertilizer in the fall. Failing this I would even go to the extent of getting the stuff in the fall and trying to argue some one into taking a note due in three months.

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