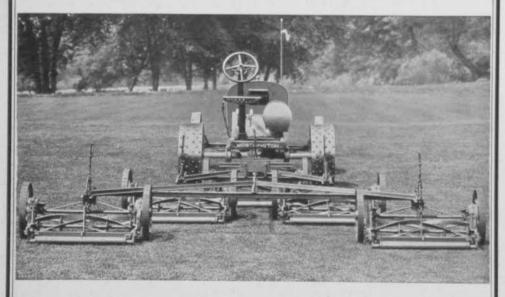
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THE BUSINESS JOURNAL OF GOLF

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THE BUSINESS JOURNAL OF GOLF

SEPTEMBER, 1927

Fertilizer's Share of Budget Is Important

By C. A. TREGILLUS

A HEAVY doubt that weighs on many a small-club green committee, and for that matter there are committees in more affluent circumstances afflicted the same way, concerns the purchase of fertilizer and the proportion of the budget that may be applied to the supplies of such materials. The question is so hedged about by entangling difficulties of prejudice and ignorance that it is often hard to get to, in a fair and unbiased manner.

There are some that think that fertilizer is more or less of a luxury, desirable perhaps but not true economy, and are inclined to compare the putting green with the average private lawn and wonder why there is so much fuss of the former and but little over the latter. There are those who in a hazy way realize that fertilizers are worth while but are afraid to invest in them for fear of raising criticism among the rank and file of the club over doubtful expenditure; there is no argument against the visible immediate indispensable greenkeeping costs, the mowing and watering of the grass, these are obvious to one and all: but when it comes to such things as compost materials and fertilizers, the direct returns are not so patent. This fact hinders the use of fertilizers quite a bit. Then, of course, there are those that fully appreciate the use of chemical and organic manures but find it hard to get adequate support when pushing their ideas forward.

An Investment Policy

Without question, there still is a great deal of missionary work to be done concerning this aspect of course upkeep. It is

surprising the amount of bias that exists regarding the use of chemicals and their application to growing grass. many other things in this world it takes a great deal of faith to start a new venture: there is a natural inclination to consider money invested in manures and compost as bread cast upon the waters with no satisfactory guarantee that it will be returned within the sower's tenure of of-Where there is an annual turnover of the green committee, the office holder has only seven to nine months active service, which is too short a time in which to initiate new ideas and methods and prove them by results. We often find that small clubs and low quality greens are associated for the simple reason that the short term committeeman has not the backing or sympathy to encourage him to treat his greens in the light of a genuine investment. In consequence his policy is to skimp through the season as cheaply as possible and let his record rest on low operating costs rather than the excellence of turf provided. Those who have broken away from this position have found that in a short time, the improvement in playing conditions has more than repaid the effort and that the increase in green fees and memberships has thoroughly justified their action.

It is the first duty of the green committeeman and those sufficiently interested in their club to aspire to that office, to acquaint themselves with the broad fundamentals of grass requirements. It is an enjoyable and absorbing study and not only will it be an interesting diversion but it will make the committee a real tower of strength behind the greenkeeper. There is a world of difference between the lawn at home, which seemingly behaves quite well under a minimum of care, and the highly cultured putting green on the golf course, a fact that seems like an exaggeration to the unthinking. However, a little thought upon the matter and contact with the work will soon reveal the artifices and manoeuvres that must be employed to hold a turf in condition under the severe grilling of tramping feet and remorseless mowing.

Study Fertilizing

Assuredly we must produce a surface that is satisfactory for play, free from blemishes or irregularities that would interfere with a dense, compact, continuous To reach this end, two environmental considerations are necessary. First is a suitable root bed, a soil that will meet the plant's requirements in the way of air, moisture, drainage, or in simple words, of a satisfactory texture. This is an obvious objective and so closely allied to good playing conditions that we all have a fair idea of what is meant. The kind of a green that the golfer likes to play on, one to which balls can be pitched with confidence, that keeps firm in the rainy seasons and does not bake when it is dry has just the sort of soil that best suits the grass that grows upon it. The second we might term as "suitable fertility." a somewhat vague designation and not so easy to understand, but really the key to successful green management, and it is on this account that an appeal is made to committeemen, who would master the job they have undertaken, to delve into this subject as deeply as time and inclination will permit. It takes a great deal of study of local conditions in respect to soil texture, climate, length of season, nature of turf, losses through mowing and the removal of clippings, and many other things before proper and efficient fertilizing can be really understood.

Putting greens are subjected to long seasons of play, and to be "fit," they should be neither over nourished nor under nourished; while it may be possible to bring them up to a high pitch of perfection for a short time, it is unwise to attempt to sustain them above what might be called a healthy standard. An overly fed, stimulated green has not the resistance to disease, drought and abnormal weather changes as one that has been conservatively tended.

Cuts "Dog Day" Deficit by Quantity Buying

By J. P. McCann. Cascade Hills Country Club.

WE FOUND our biggest house problem has been in keeping up the cafe attendance during August. Many of our members leave for the lakes and resorts that abound around Grand Rapids, and others give up golf for the warm weather.

This season I met the problem by first installing a cooler eight by ten, operated by an ice machine where the temperature can be regulated to suit conditions. Then, buying whole lambs, hind quarters of beef, chicken, etc. in large quantities, and naturally at a much lower price than we formerly had to pay, and working these up into various appetizing dishes and serving same on our regular dinner which I reduced to one dollar with half rate for children. Chops, steaks, chicken, and frogs are one dollar and a quarter.

The result has been an increase of fifty per cent in the number of meals over last season. I find many of our members drive in from the lakes to dine at the club.

In the grill room we have a bachelors' table where members whose families are out of town will always find a fellow member to dine with, eliminating the lone-some evening meal.

So we have cut down on the deficit the club suffered in the past seasons by a better method of buying and keeping up the volume of business when the overhead expenses continue the same.

Refinancing Puts New Club]

'I T'S NEVER too late to mend," adopted as a policy when a financial crisis confronted a young eastern club pulled the organization through in excellent shape and it now boasts of about as comfortable a position as a new club could enjoy.

The club started three years ago with ambitious plans and a big overhead, considering its field. This year the club reorganized making each member take a \$500 bond instead of the original \$100 membership certificates. With the club a going concern there was less difficulty selling the bonds than the organization experienced in selling its original memberships. Bond sale was facilitated by an easy payment plan. One of the first results witnessed with delight was the reduction of about \$7,000 in interest charges.

Black Hawk's Green Making and Maintenance Methods

By F. B. Hadley, Green Chairman, and J. S. Bone, Greenkeeper, Black Hawk Country Club, Madison, Wisconsin

LL persons who are charged with the responsibility of building and maintaining putting greens are constantly on the lookout for helpful suggestions. The writers have secured much help along this line from contributions in Golfdom, While we do not maintain that our practices are the best, we know that the results secured have been gratifying.

Consequently, at the suggestion of the editor, we are giving below a rather hurriedly composed outline of our methods.

Before starting work of any kind it is absolutely essential to have a labor force that can be relied upon. The more experienced a man is in golf course maintenance work, providing he uses his head, the more valuable he is to the greenkeeper. Without an adequate, well organized force, even the best greenkeeper is incapable of securing the desired results. Competent help is scarce, consequently the greenkeeper endeavors to keep a good man when he finds him.

The procedure we follow in this work is given below, step by step in logical order of sequence and includes (1) grading, (2) surfacing, (3) planting, (4) mowing, (5) top-dressing, (6) watering, and (7) weeding.

Grading

A sketch should be made for use as a guide, keeping in mind the desirability of altering the topography as little as possible. Nothing is more hideous, in our opinion, than elevated greens with steeply sloping sides. They utterly spoil the appearance of the terrain and constitute an unnatural hazard that is not needed. Constructed elevations should be blended into the surroundings by making very gradual slopes, so as to deface nature to the least degree necessary. Grading includes a

Here is a summary of the methods of an ideal team. The green chairman is a practical scientist and the greenkeeper a man with genius for turf culture methods. This association is one rare in golf, but of a type to bring joy to the hearts of the club members.

Note the emphasis they put on the element of labor. No matter how good the technique is, unless the staff is right, the results are disappointing. careful study of the surroundings to insure necessary surface drainage. It is desirable to allow several weeks to elapse after the grading is finished to permit the ground to settle.

Surfacing

This should take into consideration the soil composition and texture. A heavy clay or other impervious soil must be covered with a soil containing

humus. The addition of a considerable quantity of sand and the incorporation of a fertilizer containing available nitrogen for plant growth to the surface of the green is imperative. The top-soil is put in final shape by hand raking and when finished should be very fine, relatively loose, free of all lumps, roots, etc.

Planting

The bent grass sod is cut into rather small pieces by running it through an ordinary farm root cutter. If any clover or other undesirable plants are present in the sod, these should be sorted out. The stolons should be distributed as evenly as possible and in sufficient quantity to cover the ground well, thus avoiding gaps which are so liable to form tufts later. To keep the roots from drying out, they must be distributed over a small area at a time and covered as soon as possible. Enough topdressing is applied just to cover the stolons and the surface is rolled at once and sprinkled. Sprinkling should be done by hand, rather than with a sprinkler attachment, to avoid washing the fine top-dressing mixture into ridges. This statement also applies to established greens during the first two or three days after top-dressing.

Mowing

The lawnmowers are put into use as soon as the grass has reached a height of about two inches. The grass is moved every day thereafter, Sundays excepted, throughout the season. Preferably the mower should be run one day at an angle to the direction it was run the previous day, keeping in mind the advisability of cutting in rotation in four directions. This tends to keep the grass growing upright and to make the surface uniformly even. The mowers must be kept sharp to avoid tufting the grass—the bane of the golfer.

Top-Dressing

This is done as required to maintain the growth and condition of the grass and is as important as daily mowing. Among the reasons for top-dressing may be mentioned the following: (a) to protect the new stolons that grow laterally from near the base of the parent plant; (b) to furnish nourishment; (c) to fill any unevenness in the surface of the green. The top dressing mixture which we are using has given splendid results in the past. It is composed of two parts compost, one part sand, with which is mixed for general use one and one-half pounds ammonia sulphate per 1,000 square feet of green. The ammonia sulphate content is varied to suit conditions. It is increased for spring and fall use and reduced for use in the summer and on newly planted greens.

Watering

Water makes available the plant foods in the soil by putting them in solution. The quantity of water needed will depend upon the season of the year, the nature of the soil, and the rainfall, We believe the matter of judicious watering is one of the most essential steps in establishing and maintaining a perfect bent grass green. It requires constant supervision and good judgment to obtain the best results from watering. The surface of a newly planted green should be kept moist at all times. This is accomplished by sprinkling daily until the ground is thoroughly saturated, but never to the extent that streams are formed, as they uncover the stolons and also leave the surface of the green rough. For all sprinkling we believe a nozzle should be used that throws a fine spray, as the surface of a green becomes disfigured by too heavy a stream of water, which beats holes in the top-dressing and is likely to make little ditches.

We have solved the watering problem by employing a night man. He starts work at 7:00 p. m. and finishes at 4 a. m. His last duty is to turn on the sprinklers used to water the tees. These are allowed to run until the day force commences work in

the morning. The statement that water and more water—though not in excess—is the only hope of keeping the grass green and growing is particularly pertinent to this discussion. Next season we plan to water the approaches to the greens.

Weeding

While it is possible to control weeds to some extent by applying an acid-reacting top-dressing, every putting green requires hand-weeding at least once a season. Messrs, Oakley and Fitts, in the Green Section Bulletin for July, 1927, state that the chief weed to fight in the latitude of Washington, D. C., is crab grass. This is also true in Wisconsin. The time to eradicate crab grass is when it first becomes evident. One man can then remove more crab grass plants than can three men after the plants have started to branch. Crab grass is the greenkeeper's worst enemy and does more damage to greens than all other weeds combined.

Sand Must Contain No Lime

The sand which we have been using in our top-dressing mixture has recently been analyzed and found to contain nearly 18 per cent carbonates. This surprised and disconcerted us, as we were working under the impression that our sand carried little or no lime. It is a well established fact that lime is contra-indicated on the golf course, as it facilitates the growth of clover and wee's, both of which the greenkeeper is continually fighting. On the other hand, an acid-reacting top-dressing mixture inhibits the growth of these plants, yet stimulates the growth of bent grasses. A supply of quartz sand containing practically no carbonates has now been secured. so we anticipate better results in the future.

Acid-Reacting Top-Soil Important

The black top-soil used for composting purposes is also subjected to chemical tests to determine its inorganic and organic composition. By this method we have been able to secure a soil high in organic matter (humus) yet carrying no carbonates (lime). With this information to guide us and a contract for a load of horse manure every day of the year for composting, we feel that the putting and fairway greens at the Black Hawk Country club should soon be as good as any in the country, as nature has provided a wonderfully fertile, well drained soil which only needs intelligent management to produce an ideal stand of the desirable grasses.

So far we have been fortunate in experiencing no damage from brown patch or other fungus diseases. Earthworms are a pest at times, but an application of corrosive sublimate (mercuric bichlorid) in solution has been an effective means of controlling them.

Planting Greens in Spring

We are convinced that the best time of the year to start work is in the late summer and early fall, the idea, of course, being to secure a good stand of bent before winter sets in. However, as every green chairman and greenkeeper knows, it is usually impossible to accomplish before snow flies all the work planned, so some of it must of necessity be postponed until spring. In southern Wisconsin excellent results have been secured with bent grass stolons planted in the spring. We tried this method on one green last season and another one this season. The 1926 work resulted in a green that was suitable for use just sixty days after the stolons were planted. This green now probably has the best putting surface and the most ideal stand of fine bent grass in this section. The green that was planted this spring was ready for play in practically the same length of time.

One of the big problems in connection with spring planted greens is fighting the weeds of all kinds which grow so rapidly under the ideal conditions for plant growth which must be maintained for the grass. This necessitates several hand weedings, but final results amply justify the expense.

Youngsters' Golf Classes Bring Good Profit

By J. W. FULTON, JR.

THE golf professional who overlooks the income possibilities of the sons and daughters of members is overlooking a big bet," said a well known pro the other day.

"I'll show you what I mean. When I'd been at this club about six years, I had built my income about as high as it was possible. I'd educated the members to want lessons—I gave about four or five a day—and to buy most of their golf equipment from me. My shop was always busy.

"But like everybody else, I wanted to earn more money, and I saw I had to start something new to do it. One day I saw two of our member's kids—they were about fourteen years old, too young for junior memberships—batting some balls around the practice field, and I noticed that neither of them was swinging right. If they weren't straightened out pretty soon they would develope some bad golf habits. One of them was overswinging and the other held his club all wrong!

"They gave me my idea. That night I made a list of all the members who had kids old enough to play golf, and sent each of them this letter:

"Dear Mr. ---:

"If you're like most golfers, one of your chief regrets is that you didn't take up the game early in life. It would have been much easier to learn the finer points, wouldn't it?

"Your son, Jerry, is just the right age to take up the game. His muscles are limber and he'll learn quickly. Why not let me start him off right?

"I am organizing a junior golf class to be held from four to five o'clock every Friday afternoon for the next ten weeks. Only sons and daughters under sixteen will be taken. They will receive my personal attention and instruction and will be taught the game from the wood clubs down to the putter. Before the ten weeks are up, Jerry will play the eighteen in less than 120 strokes; how much less I can't

"The cost of the entire course is only \$10.00. I don't know of a better investment or anything you can give Jerry that will mean so much to him when he is grown up and becomes a member himself.

"The first class will be held Friday, July 16th. I hope Jerry will be there.

Cordially,

"You'd be surprised how the parents fell for the idea! Nearly all of them wanted their kid in the class, and when the first day came, eleven of them showed up.

"I started the first lesson with a little speech about golf being a lot of fun, especially if you can play better than the other fellow, and how you couldn't play good golf unless somebody showed you the right way to swing and hit the ball. I told them if they paid close attention to what I was going to show them and didn't mind if things went a little slow at first, that before the lessons were over I'd have every one of them driving a ball farther than their mothers could and almost as far as their fathers.

"I tried to make them feel the lessons were going to be a sort of game, and all during the lessons I was careful to joke with them whenever I could to keep them interested. I guess I succeeded, for every one of those kids stuck out the ten lessons.

"So you see I made \$110.00 for ten hours work, which you'll have to admit is pretty good pay!"

Sales Profit Good

"And that wasn't all. You'll notice I said nothing at all about golf clubs in my letter, but don't think I was forgetting them? I did that on purpose, because I knew that if the parents wanted to send their kids to me for lessons, they'd have to outfit them with clubs.

"Sure enough, when they came around to enroll their youngsters, they nearly always brought up the subject of clubs, and I always suggested that they buy some inexpensive light ones I had in stock that would be just the thing. I sold six sets of clubs, two woods and four irons to the set, and five bags, light canvas ones. There was a nice little profit in those sales to add to what I'd made on the lessons.

"I'm making an indirect profit of them all the time, too. This season will be the fourth year I've held the class and there are at least a dozen young players out here that I used to have in my classes. They still buy their golf equipment from me and most of them still come around for lessons once in a while.

"Incidentally," I asked, "do these lessons do the youngsters much good? What sort of scores do they shoot after the course of lessons is over?"

"That's an interesting thing," my friend, the pro, answered, "It's remarkable how much most of those kids get out of the lessons. Of course, some of them take the lessons just because their folks make them and as a result don't have a whole lot of interest in the course, but the rest get to playing mighty well. On an average, I'd say they learned to drive a straight ball at least 125 yards, and go around in 120 to 130 strokes. About one

in ten gets as good as 100 or less, and one boy who was in my class last year is so good that his folks are sending him to the Western Junior next month. He's never over 85 and generally under 80.

"Yes sir, I guess in the three years, directly and indirectly, I've earned over \$1000.00 because I started those lessons. You can say in your magazine that I haven't any copyright on the idea and any pro who wants to can make a lot of extra money on the kids around the club.

Best to Erect Bird Houses in the Fall

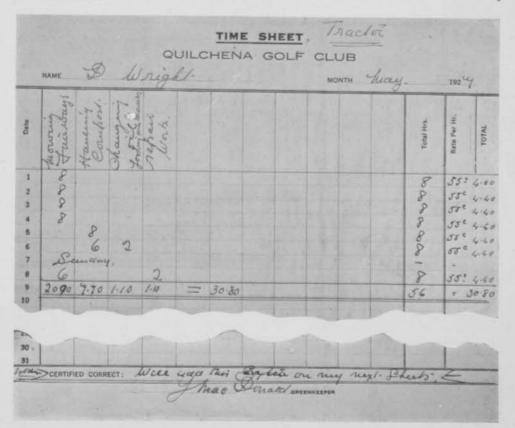
THE value of the native song birds in aiding the greenskeeper in his annual fight against weed and insect pests was discussed at length in the May number of Golfdom. A few hundred dollars invested in bird houses and other equipment will attract dozens of birds to your grounds and many dollars in greens expense will be saved annually.

Autumn is the time of year to install bird houses. Our native songsters have an extremely acute sense of smell and will refuse to nest in any house that has not had time to weather. Fresh paint and even the lingering odor of human hands will almost invariably deter the birds from nesting.

Accordingly, if the houses are put out in the spring just before the birds arrive from the south, there is little chance that they will stop on your grounds. On the other hand, if the houses have had an opportunity to weather throughout the winter, the birds will remain to nest.

Take up the subject of making your grounds a bird sanctuary at your next board meeting; decide on your appropriation, and erect the houses before winter sets in. Otherwise you may wait a year for your assistant greenskeepers—the birds.

PROFESSIONALS should not overlook the merchandising value of a well-dressed display window. Many a member has passed the pro's shop on the way to the first tee lacking enough wooden tees or golf balls for the round. He intended to buy them at the shop, but nothing reminded him of it. A well dressed window, frequently changed, is almost as effective as stopping each member as he passes and asking him to buy.



Cost Keeping Basis of Correct Operation

By ANDREW WHITE Greenkeeper Quilchena Golf Club

NE can see the time not far distant when all greenkeepers will have to keep a correct cost record of upkeep and development of their courses. I am at present greenkeeper on a new 18 hole course. When I came here (in 1925) the chairman of the greens committee made me understand that I had to keep an accurate record of the cost of all work and material, give estimates on all new work, and get tenders on all material needed for maintenance and development.

The first thing I did was to have time sheets printed. Those time sheets I have used for some years, and in my opinion are better than day slips. One may have some difficulty in getting the men to keep proper

track of their time, but this may be straightened out if the greenkeeper keeps a check one or two days a month and then compares his time with the men's time-sheets. He will soon see if the men are keeping their time-sheets correct. So far, I never have had any difficulty, in fact, when making those time sheets up one can generally tell if they are correct.

Avoid "Spy" Idea

If two men are looking after a number of greens each, their time sheets need not necessarily correspond. For example, Acuts his greens in four hours, while it takes B. five hours. That does not mean that A. has worked any harder than B. B.'s greens may lie further apart and may

be more difficult to cut. In any case, it is up to the greenkeeper to get his men to trust him and not to let them think that those time-sheets are to be used against them in any way.

If possible, those time-sheets should be made out in ink. At the end of each month I collect the time-sheets and total the hours spent on each class of work. I then make a grand total of the whole. This I enter into a ledger, using a page for green, one for fairways, one for material bought and how used, etc. At the end of the year I make out a balance sheet showing the cost of upkeep of greens, fairways, developments, etc. Fertilizers are added to cost of greens. Same applied to fairways. I give balance sheet and time sheets to the chairman of the greens committee.

Basis of Budget

The appropriation is taken from this sheet for the following year. After I get my appropriation for the year I call for tenders for the year's supply of fertilizer, etc. It would surprise many clubs to know how much can be saved by calling for tenders for their year's supply. The chairman of the greens committee and the greenkeeper can learn many things from

time-sheets. It may appear from the balance sheet that a lot of money has been spent on the upkeep of greens or some other class of work. The chairman talks it over with the greenkeeper with the result that the greenkeeper has to cut the expense on that particular class of work. On the other hand, the greenkeeper may not have had enough to work on the previous year. I might say that is the trouble the most of us have. Anyway, the chairman and the greenkeeper can, from the records of previous years, come to within a few dollars of what will be required for the upkeep of the course for the following year.

No Place for Faking

I would advise greenkeepers who have to keep records not to fake them. Tell the truth and shame the devil. As all the work outside the clubhouse comes under the greenkeeper here, the club knows exactly what the greens, fairways, club grounds, planting, trees, drainage, etc., have cost since the day that play started. I could not wish for a better man to work for than my chairman here. He helps the greenkeeper in his troubles—and they are many.

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