

ills that have beset the greenkeeper for the past few years can be traced to an overanxiety on his part to follow the acid trend.

To those—and they are many—who have already gone back to the lime kiln for a cure, I would advise them to do so in moderation; if they feel they have traveled too far in one direction, it may not be necessary for them to retrace their steps to the starting point, for somewhere along the road the true path will be found.

To this end, it lies within the reach of every one of us, as it is the duty of every one here, to lend a helping hand. The men at Washington are fine, capable fellows. You will find none of the dogmatism of the theorist in their make-up, and should you wish to approach them with a suggestion or a problem you will get all the help at their disposal and a willing ear for what you have to say.

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### Green Cost Analysis

By J. W. Bryant, Jr.

What I shall say concerns cost analysis rather than cost accounting, and I suppose it is appropriate that the subject should be the last thing on this program. With the mounting costs of golf course maintenance this question is overlooked too much.

The Detroit District Golf Association, which I represent, was organized in 1919. We have 38 member clubs, and out of those 38 member clubs, 37 I believe are members of the United States Golf Association. We derive benefits that are numerous from our affiliation with the United States Golf Association, and we would not like to forfeit that affiliation.

The Detroit district has tackled a great many problems in golf club affairs and club management, and I think one of the most interesting subjects has been that of cost analysis in the maintenance and construction of golf courses in our territory. We have dues from our members that amount to \$50 a year for clubs within a certain radius, and \$25 for clubs beyond that radius up to 50 miles. In our informal discussions of the affairs in the district we find a very wide range in the figures covering the costs of golf course maintenance among the member clubs. We have clubs of 18 holes in these informal meetings making the statement that they are operating at somewhat less than \$5,000 a year, and ranging on through 9-hole courses a little above that figure up to \$36,000 a year for the 36-hole courses. It began to be more and more a subject for discussion at our little noonday gatherings as to why this great difference in costs.

In talking about it informally, we found that there was a possibility that many clubs were not properly reporting expenses which were chargeable to course maintenance, and other clubs perhaps were charging to course maintenance certain items which perhaps should not be charged. We found, for instance, that some clubs were using water through their house meters, the house carrying the burden of that water cost rather than the green committee. We found that green committees were using pumps to spread their water, and the cost of running these pumps instead of being charged to the green committee was charged to the house committee. We found that some of the men working on the golf course were originally on the payroll under the house committee, and in the course of time their duties had been shifted to outdoor work, and yet the payroll entries had not been

changed to compensate for that shift. We found that the green-keeper was given board and room and that in the cost entries his room rent and meals were charged to the house rather than the greens work. We found that in some of the larger clubs, where the expenses were running higher, the green committee, for instance, was carrying the burden of the cost of a starter at the first tee who regulated the beginning of play, and was carrying the cost of the ranger on the course, who was keeping the slow foursomes moving, and was carrying the cost of an officer who was patrolling the entire grounds to keep strangers off the property.

In getting back to this green cost analysis, we found that our 38 member clubs paying us about \$1,700 a year in dues were spending something more than \$600,000, and it was obvious that if we could analyze that \$600,000 cost and save our member clubs 10 per cent of it we should be well repaying them with \$60,000 return for their \$1,700 investment. We first started out on the theory that we should install uniform cost accounting. We called in an outside accountant whom we considered capable, and we paid him well to study the situation and when he got far enough into his work to begin to report back. We saw that it was going to be a hopeless task to try to upset the bookkeeping systems of the 38 member clubs. There were objections among the clubs, as they had their books all arranged and did not want to change them. We therefore backed up on our idea of uniform cost accounting, and decided that we would not concern ourselves with how those clubs kept their books provided they could give us information from the books in such a form that we could analyze it ourselves, and after such analysis would turn the data back to the green chairmen of the member clubs so that they themselves could get from the data what they naturally would want to get in improving their own conditions.

About a year ago I was appointed chairman of a committee to go into the subject, and our committee decided that what we would propose should be a questionnaire to be made up in the best form we could work out and given to the green chairman of each club, asking him to fill it in carefully from the book records of his club and return it to us. We worked for some time on this questionnaire, and finally evolved a form which we considered contained questions which, if properly answered, would give us a basis on which to analyze all conditions and report back to him intelligently. I might add that a reproduction of the form has already appeared in the Bulletin, on pages 102 and 103 of the May, 1928, number. We sent that form out with a page attached, something in the nature of an income tax blank, so that with this sheet the chairman has his questions, and if there is any doubt in his mind about just what is wanted in those questions he has reference to tell him exactly what we do want.

I might say that after that form was made up, or rather since the form was made up, we have found weaknesses in it which we are correcting with the next printing. We are making notes as we go along of changes which we want to make in the form, and I think within the next two months we shall have finished our study and shall be able to send to the press a new form which will give us perhaps a better picture of what we want.

The form is divided generally into two classifications, one covering general information, and the other expenditures. The questions under

general information are numbered from 1 to 20 inclusive, and the questions under expenditures from 21 to 31 inclusive. It was not only interesting but somewhat amusing to study the expenditure items against the general information items. For instance, question 5 is, "Where do you get your water (city, well, or other source)?" Some of our green chairmen would report back that they got their water from the city, and then under question 29, "Cost of water," zero. Obviously that was wrong, and it gave us a chance to get back at the club and have them check that item. Under questions 6, "Have you any water pumps?" and 7, "If so, what is the total horsepower of the motors driving them?" they would answer that they have water pumps and get their water from a creek or pond, and under question 30, "Cost of pumping," zero. That was wrong, and that again gave us a chance to get back at them for further checking.

It is interesting to know that from extended correspondence back and forth with the green chairmen of the 38 member clubs on this questionnaire, we have dug out from them facts that are obviously wrong, and they have corrected their forms on their books, so that with the 1928 season we expect to get reports that are more fairly accurate.

The question of the cost of construction work we have undertaken to set up as an item to be deducted from the total layout of money for the golf course maintenance including work construction, so that we bring the analysis down to a cost of golf course maintenance strictly as a maintenance item, and show at the same time a separate figure for the construction work.

After the questionnaire was returned by almost every member club, we listed the 38 clubs on the margin of a blueprinted form, and across the top listed the 31 items that are in the questionnaire, so that in sending the blueprint to the chairman of the green committee in each club he was able to sit down with his greenkeeper and get a definite and accurate picture of what he was doing compared with other clubs in the district.

It is a pleasure, after putting so much work on this problem, to report that the chairmen of our member clubs are deriving substantial benefit from this work, and we hope that, with the introduction of the new form, the 1928 analysis will show us figures more in line with what we want to see in the district cost analysis.

If anyone would like to have copies of the new form which we propose to print soon, and will write to the Detroit District Golf Association, 2843 East Grand Boulevard, Detroit, we shall be very pleased to send them.

### **Rural Weather Lore Is Frequently Reliable**

Intelligent farmers and others engaged in outdoor work nowadays are not greatly interested in predictions in almanacs or in other long-range fiction, according to Dr. W. J. Humphreys, of the Weather Bureau. They rely on official reports by radio and on their own observations. Scientific forecasting of the weather does not place reliance on many of the old "signs," particularly those that are supposed to forecast one season from occurrences in the previous season. But Dr. Humphreys says that many of the sayings in regard to the weather that have been handed down from generation to generation are based on many observations and are often reliable. For example, he says a