

Cost Study Claimed Boost for Machine Maintenance

SOME GREENKEEPERS are having the "heat" put on them by wild tales of annual course maintenance costs reputed to be lower than a kidnaper's principles. Now, with the budget doing the pace-making, there can be no evasion of this gossip about Dub's Jungle C. C. or some other course being run for a year for three or four thousand dollars, even though the course mentioned may be in awful shape despite highly favorable natural conditions. Jobs have gone overboard in several instances simply because the greenkeeper is unprepared to make a proper comparison of his operating costs with those of the courses that get by for less.

When you print figures of course maintenance you can't tell all about the condition of the course, past maintenance history, soil and topographical conditions, yet all of these factors have considerable bearing on economy. It is difficult to detail the methods of labor management employed at the course being considered, and as labor customarily runs from 60 per cent to 74 per cent of the entire maintenance costs at courses, this labor management item is an important as well as uncertain phase of the entire operation.

The result is that when GOLFDOM has printed details of low cost maintenance programs there has been unavoidable criticism shot at us by greenkeepers whose chairmen have put them on the spot because their costs were higher and fair comparison of conditions was impossible. To help out these fellows GOLFDOM financed the cost research conducted at Massachusetts State college by Jay Heald under the supervision of Prof. Lawrence Dickinson. This was worked out on a percentage basis, rather than on gross costs.

Machinery the Answer?

Percentages of both 9-hole and 18-hole courses for 1931 show that greens maintenance is the most expensive part of course labor costs. On the 9-hole courses greens accounted for 36 per cent of the expenditure, and on the 18-hole courses, 37 per cent.

Further examination of the returns in-

dicates that the courses where the condition is kept up to a good standard and the costs are low are those courses where the club has invested wisely in maintenance machinery. It may cause distress to think of how mechanization of golf course maintenance may further disturb the prevailing unemployment situation, but the answer to that is when golf costs less there will be more golf courses and more people playing, consequently more men employed in golf despite lessened employment per course. Regardless of the employment aspect, clubs are cutting labor budgets. It's the same proposition as the "buy now" movement of last year. Keeping men on the payroll and "buying now" are noble ideas but who is going to start?

It looks from the maintenance records that the "buy now" movement is being forced by the necessity of low course budgets. Rarely do the new equipment purchases of an operating golf club run as high as 5 per cent annually, and when this small portion of the budget can be utilized—as it frequently is—in cutting the course maintenance cost as much as 25 per cent, purchasing is made imperative by the demand for economy.

Greens Mowing in Spotlight

Excellent practical men have debated power vs. hand green-mowing to no generally accepted final decision, but the power advocates cite cost figures that make their case interesting. At the Worcester (Mass.) C. C. where Willie Ogg ably combines greenkeeping and professional work, the labor cost for greens, traps, fairways, approaches, tees, rough and repairs is \$4,849.50. Figuring on the basis of labor costs being 70 per cent of the average course maintenance expense, the entire course maintenance expense would be only \$6,927 (without supervision) for the 18-hole establishment. But due to mechanization of the operations the comparison with courses where hand work is more extensive would be unfair to the manually worked course, the power interests add. Ogg writes the Worthington people that he estimates he saved the price of the power mowers he uses on greens,



Jersey's Greens Short Course Class at Rutgers U., Feb. 22-26.

tees and approaches, in less than two months. Similar statements are made by other users of power equipment. Questions of accounting methods and of possibilities of time lost in traveling from job to job are raised by the advocates of manual mowing who also bring up the matter of possible expensive investment in emergency equipment for safety's sake.

But these are the days when figures talk and as the figures put up by the power users are eloquent, the subject of greens mowing is getting serious consideration. The manual people question the appearance of the power cutting jobs or the effect of power mowing on the turf, but the power folks come back with some logical dope in rebuttal. After all, when the loud pedal is being put on costs, the power green mowing proposition is doing golf a service in sharply focussing attention on what effect purchase of new equipment may have in producing ultimate economy.

Analyzing the Figures

Previous reference has been made to the folly of jumping at conclusions from bare presentation of course maintenance cost but some of the labor cost figures the power people put up makes one stop, look and listen.

O. T. Jacobsen, green-chairman, Kilbourn (Wis.) C. C., writes GOLFDOM giving figures on Kilbourn's labor cost for 1931. It is apparent from the fairway mowing cost that there was quite a little time during the season when the fairways were not mowed, and it will be noted that the greens were not mowed more than five times a week, which is less than the usual practice at private clubs.

Mr. Jacobsen, whose interest in power green mowing naturally is acute, because

of his connection with the mower manufacturing company bearing his name, says:

"In August GOLFDOM you ran an article by J. M. Heald, pertaining to the maintenance cost of golf courses, inviting other clubs to submit their figures for the benefit of comparison. We are accordingly pleased to submit the following statement of the labor cost to maintain the Kilbourn C. C. for the past season. Greenkeeper's salary is not included.

Mowing greens—(27)	\$ 420.24
Sprinkling, top dressing and miscellaneous	625.19
Cut, water and renovate tees.	97.89
Mowing of fairways.....	341.20
Special work on fairways....	304.79
Work on bunkers.....	178.07
Preparation of compost.....	66.28
Miscellaneous labor and new construction	557.65
Repair work	177.92

\$2,769.23

"The Kilbourn C. C. is a 27-hole course, with 27 fine, built-up, undulating, Washington Bent greens, averaging 6,000 sq. ft. each or better. This is the third season that the course has been in full play. In 1931 it was open for play from the 15th of April to the first of November, with a 25% increase in play over the year before.

"The grass was kept in the very best of condition throughout the season and suffered practically no brown-patch which was so common with many courses in this area. With the heavy play and high standard of maintenance, we feel that our operating expense has been very nominal. It is our impression that many other courses are spending much larger amounts for maintenance with no better results. For

this reason we like to comment on how we manage to keep our operating expenses so low and avoid some of the difficulties experienced by others.

"In the first place, we do not use any hand mowers on the course whatever, all tees, approaches, bunkers, etc., are kept properly trimmed with a small Jacobsen power mower and the greens are mowed with two 24-inch Jacobsen power putting green mowers.

"An accurate cost record was kept for all operations on the course during the season and you will note that the cost of greens mowing for 27 greens amounted to only about \$15.56 per green for the entire season, or approximately 13c per cutting.

"With power mowers it is not necessary to mow the greens more than 5 times a week, whereas if hand mowers were used, it would be necessary to mow them every day, the growth of the greens being so heavy that it would be hard to mow a 2 days' growth with a hand mower. The turf actually becomes stronger by letting it grow one or two days each week without cutting. This does not interfere with the playing qualities of the course as days are selected when the play is not so heavy.

"We attribute the immunity of our greens to brown-patch to the frequent brushing and topdressing of the greens, especially during the hot, dry weather. Brushing of the greens whenever the growth appeared stunted or during the early season when the growth was at its height, kept the greens from matting and improved the grain of the bent. This is easily done with a brush attachment and also makes it possible to brush in thoroughly, light applications of good topdressing material. Frequent application of topdressing is, in our opinion, superior to the use of chemicals and provides excellent cushion to hold a pitched ball. The greens were true and fast throughout the season."

Machinery Relics Costly

Charles C. Worthington, veteran of American golf play and business who heads the Worthington Mower Co., for a number of years has given close attention to comparison of power and manual mowing costs, back to the time when the comparisons dealt with horses vs. tractors for fairway mowing. He is of the opinion that closer attention necessarily being given to course maintenance costs today, will speed adoption of power greens mow-

ing. Commenting on club figures on fairway mowing costs, Mr. Worthington brings out that obsolescence is doing plenty of hidden stealing from many of the country's courses. Referring to a number of representative course maintenance cost records, he notes:

"By looking over these statements of the economies mowing machines have wrought, you will observe that, in the final analysis, the results indicate machines that were the best 4 years ago now cost too much to run in labor and time, to suit the exigencies of the day. Compared with the newest, these old machines are inexcusably extravagant. That is why we frequently advocate exchanging them for a new outfit, rather than to incur the expense of overhauling and renewing the old.

"The situation is somewhat like that of the automobile trade, where it is so often found better policy to make an exchange for the latest model before the older one has lost too much of its exchange value. Until mowing machines get entirely obsolete, they have more or less of an exchange value, oftentimes of considerable amount, which added to the saving of the running cost of the old models, makes the purchase of the new a real economy instead of an expense.

"I am heartily in accord with efforts to lower the construction cost of golf courses and the expense of their upkeep. Both of these objects may be obtained today without impairment of the best standards, through the exercise of good judgment alone—first, in the selection of the architect, then of the greenkeeper, and then of the machinery. The time has passed when it was thought necessary to spend huge sums on the construction of a course—to make hills where valleys were, and putting greens of swamps. It has only required, we have found, to pay a little more attention to business details in the selection of the site, and a little less to the feathers of the big chiefs of golf architecture. Golf today may be readily made here, as it has been in Great Britain since the beginning, a game within the reasonable reach of all."

OVER-FERTILIZATION can be just as harmful to turf as under-fertilization. A fairly fertile loam is best for putting greens. The use of enormous quantities of manure, humus and similar materials is not only a waste of money but often most detrimental to proper grass growth.