Plan Your Work, Work Your Plan
Know what it costs.

BY DARRIN M. BATISKY

Golf course superintendents face many challenges, and an uncertain economic climate intensifies the importance of staying current with evolving technology, balancing/managing the cost of course presentation, and first and foremost, meeting the needs and expectations of golfers. Golf course maintenance budgets are being scrutinized more and more each day. The rising prices of supplies, such as pest control products, fertilizers, fuel, parts, topdressing, etc., are making it difficult to maintain the status quo. Without question, these items are important and they significantly impact the budgeting process, but it is the labor-related expense, or human capital, that is the most significant component of the golf course maintenance budget.

Surveys have documented that a typical line item cost for labor to maintain a golf course is 50% to 60% of the total operation’s budget. Unfortunately, the relative size of this line item, compared to the remainder of the budget, makes it an easy target for reduction by the governing body of the golf course. Being able to quantify labor needs, as based on the members’ desired setup of the course, is critical and, in fact, essential to outlining the real cost of maintenance. Labor cost can be reduced, but not without affecting course setup criteria.

The cost of conditioning and presenting the turf in the desired manner needs to be quantified. Doing so provides a mechanism to equate budget numbers for course conditioning to efforts that are, after all, developed from analyzing golfer demands. Sounds simple, right? Most superintendents can approximate this information for each job on their courses, but I believe that a more formalized and accurate approach should be utilized to track work hours and the cost of operations.

DATA = KNOWLEDGE = POWER

As a student at The Ohio State University, I was exposed to a life equation by my advisor and mentor, Dr. Karl Danneberger: **Data = Knowledge = Power.** There are many applications for this equation. In turf management, we use university or independent research data as a starting point to determine which pesticide or fertilizer to use when formulating best management practices. Reviewing National Turfgrass Evaluation Program results (NTEP) provides information to make selections of grasses that will perform best in our area. Having access to **accurate and reliable** data is critical to make daily decisions, as well as guide...
the development of future programs. The old adage applies: "You can't manage what you don't measure," and measuring labor efforts is an important aspect of your budget process.

I was first exposed to this type of data collection as an assistant in northern New Jersey at Ridgewood Country Club, working under the direction of Ed Walsh, CGCS. One of Ed's standard operational procedures was to track labor use on the golf course. It was worth the effort and has become a standard operating procedure at our facility.

Computer technology allows data collection, tabulation, and interpretation to be completed very efficiently. We make use of word processing to produce the forms and a spreadsheet application to enter and interpret data.

THE SYSTEM

Fast forward to my current superintendent's position at Chartiers Country Club in Pittsburgh, Pa. We use a form on which each employee enters hours worked for each assigned task. The forms are stored in an organizer that hangs on the wall in our break room, and there is a file folder for each employee. The accuracy of documenting labor activity is important because it provides a very clear picture of where member dollars are being invested in the care of their course.

Our form has 24 categories, but we focus heavily on tracking mowing costs. Mowing is divided into nine specific subcategories, each relating to a specific area of the property. The other 23 categories are common tasks performed on a regular basis. There is a miscellaneous category that is used to record activity for tasks that are not as defined, more dynamic, and subject to change.

Each crew member is responsible for adding up his or her work hours — horizontally for specific tasks and vertically for daily hours. The week's total labor for each employee is presented at the bottom right of the form. Summarized information from each sheet is then entered into an Excel spreadsheet by one of our assistants. The raw data are summarized, offering a running total of the labor cost of each activity conducted on our course.

These daily/weekly work records also serve as backup to our computerized time card system. Any issues that employees have with their paychecks can usually be resolved by comparing the labor sheets that they fill out with their paychecks. Occasionally mistakes happen, but this check and balance gives the employee and manager a means to correct the situation equitably.

The spreadsheet looks similar to the daily work record; rows represent weekly task totals, and columns indicate weekly total hours worked. The data allow us to track labor costs during different times of the year, and we can track trends over time. For example, a few years ago we added naturalized areas to the golf course. While it wasn't specifically done to save money, the hope was that we could shift resources to more important areas of the property. We tracked the labor requirements of the naturalized areas in our miscellaneous designation. We wanted to know if there was any net gain/loss to our labor expenditures. What we found was that we were spending as much on labor to mow naturalized areas as we were spending on mowing our practice tee.

BUILDING THE HISTORY

We began tracking labor/time costs in the spring of 2002. At first, the data were utilized to explain where the cost of labor was being used. When we were asked about why we needed a specific level of labor to condition the course, we didn't have the support documentation to justify expenditure requests. Prior to tracking labor/time costs, requests for an increase in labor resources were structured according to what we thought was needed, versus knowing what it took (cost) to give our members what they expected. The program has evolved into a tool we use to quantify the labor costs of every aspect of course care. We know the labor cost of mowing the fairways and the labor cost of presenting the bunkers. We can summarize the cost of managing the tees as well as the naturalized areas. Tracking labor expenditures from year to year provides a mechanism to explain cost increases when members request a course setup change. Monitoring the trends can help explain how golfer demands affect labor costs.

The information also allows us to plan for the future. If we expand or alter a fairway, add or eliminate bunkering, create a collection area or increase our naturalized accents, we can budget more efficiently and accurately to manage these areas. Conversely, if we are asked to cut back, we can predict the effect on course condi-
USING THE DATA: THE EVOLUTION OF THE MAINTENANCE PROGRAM
Comparisons of labor usage for 2002 and 2007 showed that time spent mowing greens was reduced by about 2% of total labor hours, which was a 16% reduction for the annual total amount of time spent on that task. However, greens rolling activity was increased by 0.8% of total labor activity, which equated to a 77% increase in annual labor time for the task. This quantifies a change in management philosophy to roll more and mow less, an industry trend that we have adopted here at Chartiers Country Club. The information provides guidance for the future as we receive requests to intensify putting green maintenance. We can predict the cost of increased rolling with increased mowing, but more importantly, we can present programs in a way that allows decisions to be made based on economics, not emotion.

USING THE DATA: WHERE IS THE MONEY GOING?
I can tell you where we spend our labor maintenance dollars each and every day. Quantifying labor cost for each task places a tangible value on a member expectation of course presentation. By tracking and knowing what each regular task costs, we are also able to deal with the add-on items we are constantly asked to do or unexpectedly need to absorb. There have been several instances when we have needed to remove ice/snow during a midwinter thaw. Although we do not anticipate doing this every winter, tracking these man-hours helps explain where labor monies have been utilized and where shortages may occur in the future. On another occasion, we were asked to install intercept drainage around our golf shop in order to reduce the chance of flooding. We were able to perform the work with in-house labor, rather than using an outside contractor. While many recognized this was a saving, itemizing and tracking the labor cost helped explain the impact of this completed add-on project, which was absorbed in the golf course maintenance budget.

USING THE DATA: FORMULATE FUTURE PROGRAMS
Knowing what things cost is the only way to forecast our golf course maintenance budget. Tracking labor use, coupled with time studies, allows us to estimate the cost of future programs and maintenance objectives. For instance, we looked to improve the presentation and playability of the intermediate rough adjacent to fairways, and we know how much our current maintenance programs cost. We trialed a demo mower that looked like a good acquisition, but by accumulating field data we found that, while a new mower may provide a better quality of cut, we projected that we would need to mow one to two more times per week. Totaling the cost of program adjustments (fertilizer, pest control, and associated labor to implement), provided us a good estimate of how our budget would be impacted.

CONCLUSION
Collecting and building labor data records from your operation will be very worthwhile. The knowledge you gain can be used to generate the power you need to make better decisions and exceed golfer expectations.

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