



The time necessary to perform each basic maintenance task, such as raking and trimming bunkers, should be recorded and detailed as part of the labor analysis.

A Labor of Love or a Love of Labor?

A detailed labor analysis is effective for tracking costs and making decisions.

BY PATRICK J. GROSS

To the uninitiated, golf course maintenance seems simple. You mow the lawn on Monday and then have plenty of time to do other things throughout the week. It almost doesn't seem like a full-time job. Golfers, owners, and course officials often have a difficult time understanding how it can take so many people to perform a relatively simple task. So, how many people does it really take to maintain a golf course? Here is the definitive answer: *It depends.*

There are many differences among golf courses that make it difficult to apply a simple formula to all circum-

stances. First, no two golf courses are alike with regard to total acreage, terrain, design, number of bunkers, lakes, landscape area, trees, soil, water, and other factors. Labor requirements are different among courses because of these various factors. Second, golfers, owners, and club members have differing expectations for course conditioning. Some are willing to pay more for higher maintenance standards, while others cannot justify additional labor expense because of modest green fees or membership dues. Third, emergencies and unforeseen repairs are difficult to anticipate, yet must be

absorbed into the daily maintenance routine. Accurately forecasting such emergencies is difficult, if not impossible.

In the Southwest, labor costs comprise approximately 40% to 55% of the total maintenance budget, with staff sizes ranging from 6 to 40 employees for an 18-hole course. Labor budgets are especially scrutinized during difficult economic times, knowing that any saving in this area directly improves the bottom line. In recent years, many courses have found it necessary to reduce staff size, yet maintenance requirements remain the same.

Acknowledging the many differences among golf courses, the best approach is to perform a detailed labor analysis that accurately reflects the maintenance requirements for each specific site.

YOU CAN'T MANAGE WHAT YOU CAN'T MEASURE

Businesses involved with manufacturing have used time-and-motion studies to determine precisely how much labor is required to produce a given product. This same principle can be adapted for measuring and managing the various tasks involved in golf course maintenance. A golf course labor analysis should be divided into five distinct areas¹:

1. Required weekly maintenance.
2. Required periodic maintenance (weekly average).
3. Projects and emergencies (weekly average).
4. Preparation, break time, training (weekly average).
5. Benefit hours (weekly average).

Given the fact that maintenance schedules typically change from season to season, it is recommended to divide the analysis according to seasonal requirements appropriate for the location and climate at the course.

The next step is to develop worksheets that list the specific duties for each of the five maintenance categories, as noted in the examples provided in Tables 1 and 2. Some maintenance duties are common to all golf courses, such as mowing greens, tees, fairways, and rough. Other programs will be specific to a particular course, based on site characteristics, preferences of the superintendent, golfer expectations, and experienced staff. The various line items on the worksheets should accurately reflect the maintenance schedule at each course. Be sure to include an explanation next to line items that may need clarification, such as the tasks and time involved in putting green aeration and topdressing.

Compiling the labor hours for each maintenance activity will take several

| Task | Mon | Tue | Wed | Thur | Fri | Sat | Sun | Total |
|-----------------------|-----|-----|-----|------|-----|-----|-----|-------|
| Setup | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 28 |
| Mow Greens | 12 | 12 | 12 | 16 | 12 | 16 | 12 | 92 |
| Mow Fairways | 6 | 6 | 6 | 6 | 6 | 4 | 4 | 38 |
| Mow Rough | 16 | 18 | 16 | 16 | 16 | | | 82 |
| Tees, Collars, Aprons | 10 | | 10 | | 10 | | | 30 |
| Bunkers | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 84 |
| Spot Water | 10 | 10 | 10 | 10 | 10 | 8 | 8 | 66 |
| Rotary | 4 | 8 | 4 | 8 | 4 | | | 28 |
| Divot Repair | 8 | 8 | 4 | 4 | | | | 24 |

Example of required weekly maintenance. This is the first step in performing a detailed labor analysis, and it should be customized to reflect the activities of each individual course.

| Task | Times/Year | Hours | Total | Explanation No. of Staff / Hours Worked |
|------------------|------------|-------|-------|--|
| Aerify Greens | 4 | 120 | 480 | 15 staff / 8 hours |
| Verticut Greens | 20 | 4 | 80 | 1 staff / 4 hours |
| Topdress Greens | 20 | 10 | 200 | 2 staff / 5 hours |
| Fertilize Greens | 26 | 5 | 130 | 1 staff / 5 hours |
| Pest Control | 15 | 6 | 90 | As needed / annual average |
| Aerify Fairways | 2 | 140 | 280 | 4 staff / 5 days |
| Aerify Tees | 2 | 84 | 168 | 3 staff / 4 days |
| Edge Paths | 10 | 16 | 160 | 4 staff / 4 hours |
| Tree Trimming | 6 | 32 | 192 | 4 staff / 8 hours |
| Flower Beds | 2 | 24 | 48 | 2 staff / 3 days |

Example of periodic maintenance requirements. The time necessary for infrequent, but critical, maintenance activities must be detailed in the labor analysis.

weeks, requiring patience, persistence, and the assistance of the staff. Although it would be ideal to compile data for an entire year, a fairly accurate assessment can be made by measuring over a period of four to six weeks in each season. It also is helpful to review daily maintenance records over the past few years. Over time, trends will emerge that objectively reflect the maintenance requirement at a particular course. An

important area that is often overlooked is the weekly average of benefit hours. Most employees receive vacation, sick leave, and time off for holidays. Having a staff at full force for the entire year is unrealistic, and accounting for the time devoted to employee benefits is an essential part of the exercise.

Finally, a summary document should be prepared that details the weekly average of required maintenance com-

| Table 3 | | |
|---|---------------|---------------|
| Analysis of Required Maintenance vs. Available Labor | | |
| Category | Winter | Summer |
| Routine Maintenance | 380 | 509 |
| Periodic Maintenance (average/week) | 73 | 114 |
| Projects/Emergencies (average/week) | 24 | 50 |
| Benefit Hours (average/week) | 51 | 51 |
| Preparation & Breaks | 75 | 75 |
| TOTAL HOURS REQUIRED | 603 | 799 |
| TOTAL HOURS AVAILABLE | 600 | 600 |
| Surplus / (Deficit) Hours | (3) | (199) |

Summary of weekly seasonal labor requirements. It is essential to include benefit hours and break time to provide a realistic overview of the labor required for the maintenance operation.



Once the labor analysis is completed, the results may indicate opportunities to retrain employees to improve efficiency.

pared to the available labor hours, as noted in the example provided in Table 3. The total hours necessary to accomplish the various tasks should be compared to the total amount of available labor hours. In some cases, there will be a deficit of labor hours to accomplish the required tasks. Deferred maintenance directly affects day-to-day course quality and can have a cumulative negative effect over time.

IMPROVING EFFICIENCY

Sometimes, the details of the labor analysis can be quite surprising, indicating that some tasks take more time than originally thought. The question then becomes, “Is there a way to improve efficiency and get the same job done in less time?” Perhaps there is a new piece of equipment or old-school maintenance technique that can be implemented to save time and labor. Some superintendents and managers have come up with creative ways to multi-task or adapt maintenance schedules to get the most out of each available labor hour. With facts at hand, the ensuing discussion becomes more objective and productive. In other cases, adding more employees is not a realistic option. The discussion can then focus on what maintenance activities can be cut from the schedule so that the available labor hours can be devoted to the most essential areas to preserve and maintain course quality.

TRACKING CHANGES

Change is inevitable, and that is especially true for golf course maintenance activities. New equipment or techniques may be employed to improve quality and efficiency, or additional maintenance is required to compensate for increasing play or the deficiencies of an aging golf course. Updating the labor analysis at least every five years is a good idea so that the projections accurately reflect current maintenance activities and expectations for course conditioning.



Sometimes, old-school maintenance techniques, such as using gang mowers on fairways, can be adopted to save time and labor.

BENEFITS OF A DETAILED LABOR ANALYSIS

Golf course owners, managers, and most course officials are businessmen, not agronomists. Although they may not understand the nuances of maintaining a golf course, they understand that labor costs are a major portion of any business. A detailed labor analysis provides several benefits, including:

- Creating a detailed picture of the specific tasks and the time necessary to maintain the golf course.
- Forming a factual basis for making critical business decisions, such as whether to add employees or what activities need to be cut should it be necessary to reduce staffing levels.
- Highlighting potential opportunities to improve staff efficiency.
- Aiding in the development of realistic maintenance standards.

A careful and objective evaluation of golf course labor requirements puts the facts on the table and is ultimately a very effective communication tool.

REFERENCES

¹Moore, Martin. Required Maintenance Versus Available Labor — Are You Adequately Staffed? *Green Section Record*. July/August 1988. pp. 12-14.

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“Low” maintenance does not mean “no” maintenance. Native landscapes still require periodic maintenance that must be accounted for in the labor analysis.