Inventory control and product purchasing are not issues limited to only large companies. Today, multiple reasons exist for green industry firms to take more time making product selections. Issues that need to be addressed are:

- legal reporting requirements for material usage,
- determination that products were applied in accordance with the label rates for the product, and
- cost impact of excessive materials usage in reducing a firm's profitability.

The process of selecting materials for the coming year should not be limited to price consideration. Today, turf professionals must make decisions about the most cost-effective products for the properties they maintain. Other considerations are the constant development of new products and the multiple formulations available.

The problems confronting a turf manager cover three basic areas. First: how to determine the true cost of products used; second: how to determine the effectiveness and selection of products to be used; and third: why there is a need for variable agronomic programs for the turf being serviced.

**Material costs**

In analyzing the total cost of using various products to control turf problems, a system needs to provide information to the management on a daily basis. This data should be capable of fulfilling the many regulatory, accounting and operational functions needed to manage a business. A typical system should contain the following:

1. Total turf area treated by day by an employee.
2. Total product usage for the day.
3. Projection of product usage based on the agronomic program the employees are supposed to be applying.
4. Comparative analyses of the actual product used per day vs. the agronomic program for the day vs. the area treated for the day.
5. Comparison of product usage with labels for over or under application.
6. Service calls run for the day by employee.
7. Service call product usage by area treated.
8. Reconciliation of product usage with the physical inventory.

This system, though designed to account for product usage, also provides management with an insight into many other areas of the company's performance.

Employee performance has a definite impact on profit. Here are the areas that should be considered:

1. Total area treated for the day: was the work performed too quickly resulting in increased service calls in the future?
2. Product usage for the day: was the product applied at a rate under the
label which resulted in less than desired control, or in a case of overuse, is liability a potential issue and is excessive use resulting in higher costs?

3. Product application at other than the programmed rate: does the employee need additional training to learn how to apply materials in accordance with program levels?

4. Inventory usage for the day, compare actual to physical: many issues. Are products being stolen? Are additional areas being serviced that are not going through the accounting records? Do long-term trends by all workers indicate a potential fill chart problem (if liquid) or miscarriage of spreadsers (if dry)?

This calculation of material use is not the only cost needed to determine your material cost of operations. The costs of under-use and the additional resultant service calls also need to be accounted for. Since service calls require additional visits to a customer's property, the following additional costs need to be determined.

1. Direct labor to perform the service call (direct labor, fringe and supervision).
2. Vehicle costs (fuel, oil, maintenance, insurance, etc.).
3. Administrative costs to trail service call and to handle customer communications, etc.
4. Supplemental material costs not used in basic turf program (fungicides, pesticides and herbicides not applied on a broadcast basis).

To calculate non-material cost for service calls, use the following formula:

\[ \text{Total} = \frac{\text{Labor} \times 0.35 + \text{Vehicle} \times 0.12 + \text{Administrative} \times 0.18 + \text{Other direct} \times 0.04}{0.69} \]

Most firms in the green industries can convert the above percentages into dollars by knowing the total revenue you will earn for the fiscal year. For example, if expected annual revenues are $900,000, total cost based on the above 69 percent equals $621,000.

If 4,300 customers receive five services during a year, the employees will make 21,500 stops. Based on the services call data revealed to the PLCAA in its annual surveys in 1985 and 1986, recalls or service calls are approximately 10 percent of all calls. Total stops for service delivery would be 23,650 (21,500 plus 2,150). The total cost for each stop would be calculated by dividing $621,000 by 23,650—$26.25.

Thus we see that non-material costs amount to approximately $26 per stop, whether it be to deliver the basic program or perform a service call. Based on the results of firms in the green industries over the past three years, costs have increased to between $30 and $40 for all costs of a service call. Do you know what your service call costs are?

**Product comparison**

With the constant reformulations of turf products and the development of many new products due to environmental pressures or employee health concerns, it is important that companies keep current in technical awareness. If the time doesn’t exist to stay current technically, don’t rely on product sales personnel. Here are some information sources to increase your technical knowledge.

1. Turf extension agent in your market.
2. Fellow turf professionals in your area.
3. PLCAA technical director.
5. University research on grass species you treat.
6. Publications such as *Landscape Management*, *Lawn Care Industry*, *Grounds Maintenance*, *Lawn Servicing* and *American Lawn Applicator*, to name but a few.

But this public body of information should be balanced with the results of the agronomic program you followed last year. Often a firm doesn’t change its program enough each year even when it didn’t work the year before.

The aggressive and often more profitable firms evaluate their turf results each year, conducting a survey to determine customer satisfaction with the turf density and color. Remember to take into consideration the cost of service calls. Often service calls may be the result of product ineffectiveness or non-performance even when applied to the turf at the label rates.

**Agronomic programming**

Not all lawns need the same agronomic program to reach their peak condition every year. Over-selling customer expectation and then not being able to deliver the promised results is one of the principal reasons for cancellations in the lawn care industry today. Do all lawns need the same agronomic program? Shouldn’t programs be changed during the year based on local conditions?

If you have answered yes to either of these questions, do you run different programs in your market for customers who have different turf problems?

Most aggressive lawn care firms—whether liquid or dry—deliver different agronomic programs to their customers in a round depending on the turf requirements. The benefit of this is often either reduced product costs or increased customer satisfaction due to the custom applications. Problems include more complicated routing if you are a liquid firm or potential employee mistakes in product application if your services use dry products.

Based on more than 15 years of experience in developing agronomic programs for the turf industry, Bob Robinson, an All-Green senior consultant, recommends the development of various cost-level programs to be used depending on the years of professional turf service a property has been served. Experience has shown that the additional time to vary the program for older customers often results in more turf density, less weed pressure and increased customer satisfaction because of the turf’s durability. The turf professional must make a commitment to maintain an ongoing relationship with each customer, so the program must balance root growth and leaf blade color.

**Summary**

Selection of products should not be taken lightly. Analyze the results of your current program. Evaluate the service calls required during the past year and weigh the issue of increased product cost with a related reduction in service calls.

Finally, make sure your inventory system meets the regulatory reporting, usage documentation, and the management information data to assist in better managing a more profitable business. If, through improved product selection, a firm can cut its operating costs only two percent, often this amounts to a before-tax profit increase of 15 to 20 percent.