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Circle No. 129 on Reader Inquiry Card

Customers are not swarming to your company for services. Employees are turning over at a higher rate than ever. Productivity seems to be slipping off.

If these conditions are not happening in your company this year, you are an exception and in the minority in the green industries.

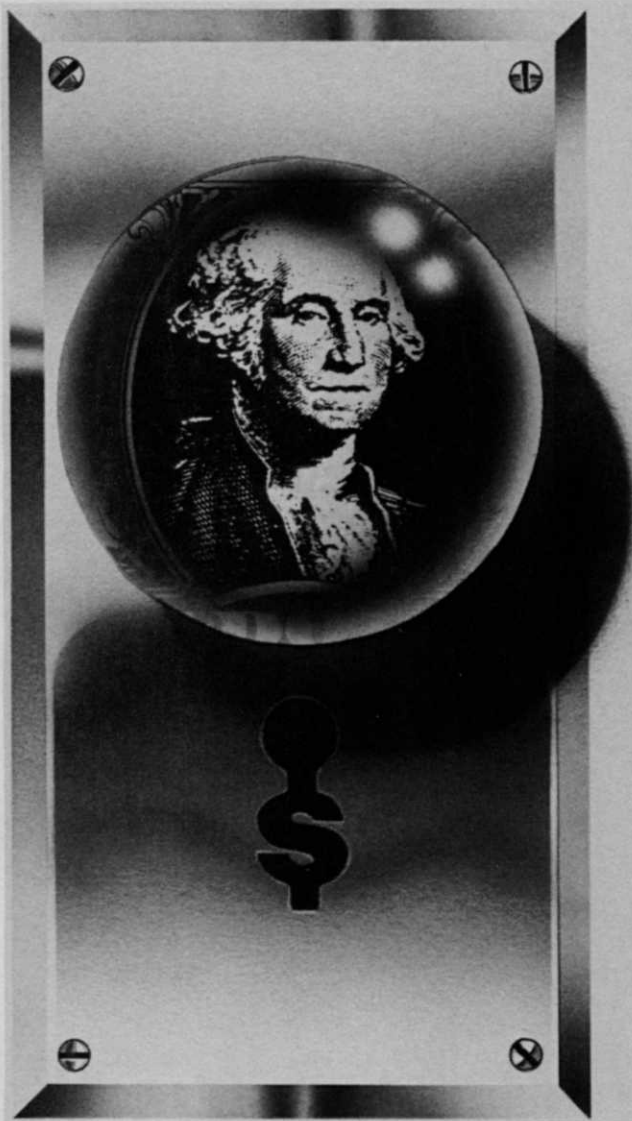
Why the sudden change of events? Psychologists have extensively researched the effect of work environment on the human component, the employee. Through this research, they have identified certain specific factors that influence productivity for the outdoor work industries. The three factors that appear to be specifically applicable to the green industries are physical, human and organizational.

For many jobs involving a lot of physical labor, a pattern of productivity emerges over a period of time. Influencing the worker are many factors that can cause a reduction or increase in his or her job performance efficiency. Some of the factors in the green industry are:

1. Customer interaction or the lack thereof;
2. Route scheduling efficiency;
3. Drive time to service customers;
4. Production quotas;
5. Service calls or re-treats; and
6. Equipment breakdowns.

Knowing this has led to our research into the productivity efficiency of employees in the lawn care or maintenance industries. The chart on the following page reveals the fruits of our labors:

From this daily productivity efficiency table, it is evident that employees who work longer hours per day may not produce the financial results that you might expect. In addition, we found



BOOST PRODUCTIVITY, BOOST PROFITS

Efficiency, morale and pride are three keys you can use to turn the lock of productivity. Once that lock is turned, you can open the door to profitability.

by Ed Wandtke, CPA

that employees who were asked to work more than 10 hours for an indefinite period of time often "took a day off" to recover, relax or even look for a new job.

So how can you increase productivity and still retain your employees? Let's look at the three key factors that influence productivity in the green industry.

The amount of physical effort needed to perform all of a job's tasks will influence an individual's level of productivity. *Physical effort* is defined as exertion, lifting and weather.

Two industrial engineers, Frederick W. Taylor and Dr. Gilbreths, extensively evaluated the work in a job to determine if there was a more efficient method of performing the tasks. But when was the last time you went out to see your employees performing their tasks? Have you developed a system that all of your employees follow to complete their tasks? Do you let each employee do what is most comfortable for him or her?

Over the past 10 years in the green industry, I have found that many employees, left to their own devices, do not realize the most efficient methods to perform their tasks. Efficiency frequently is not achieved until an employee works on the same or closely-related job for up to three years.

Knowing this, I have advised our clients to develop a job task sequence list for each of their vehicles. Whether it is chemical lawn care—liquid or dry—or lawn mowing and property management, a list can be developed. By developing the work sequence and task split lists, you can achieve faster training time of new employees and less downtime on properties because someone is wondering what to do next.

Reviewing the

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work sequencing for each day can also lead to increased productivity. For example, use non-work time to reach the farthest drive location in order to reduce "windshield time" later in the day as an individual or crew tires.

All companies in the green industry must recognize the effect of the weather on an individual's performance. Rain may make mowing very dangerous or difficult. Applying dry fertilizer in the fall or spring when the property has a fresh coat of dew may lead to the spreader or applicator tipping over. Wind and rain may keep a liquid lawn applicator from working. The heat of the summer frequently lowers production.

Yes, there is a relationship between the weather and production in many companies. Most companies, though, do not recognize many ideas that can help the employee stay on the job rather than quit at the sight of bad weather. Some companies are even able to increase productivity in the heat.

What is being done by those companies who are realizing this increase in productivity?

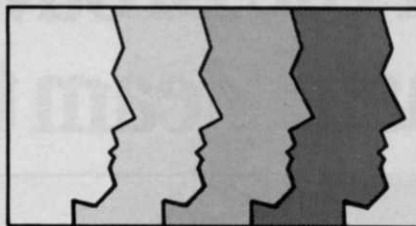
1. Companies are recognizing that liquid refreshment breaks in the field are as much needed as coffee breaks are needed in the office. Do you encourage your employees to take such a break? If an employee does not want to take the break, encourage him or her to. It will result in sustaining a higher work productivity level all day than for individuals who do not take the break.

2. Make your employees take a lunch break. This is not only a time to add nutrients to the body, but it can also serve as a refresher to the "will." The best lunch break is when employees eat out of the production vehicle. I encourage employees to go to a park or shaded area to sit down and relax while they eat their lunch. This will allow the individual to recover better, and it will help increase productivity after lunch.

3. Increase efficiency in getting your employees into and out of the office each day. Don't let the day go to waste because there is no plan when vehicles leave the shop or when they return. One of the most common reasons for inefficiency is the "stand-around-and-wait" routine. Whether this is morning or evening, tasks performed immediately after this delay frequently contain more errors or have been performed very carelessly. One way to avoid this is to have a plan for all individuals when they arrive each morning and then when they return in the evening. Have you checked your production employee area recently in the morning or evening?

4. Provide a cool container system in each vehicle so that the employee

MANAGEMENT



IN BUSINESS

has a permanent place to store liquids. Many companies today are even providing the liquids in an effort to better attend to their employees' physical needs.

The attitudes of a company will influence the productivity of its employees. As we saw during the Chrysler turnaround, Lee Iacocca told the employees and the world that they were winners. He went so far as to bet the company on his hunch. But you are not as large as Chrysler. How can what he did work for you? What did he do?

He told his employees that he believed in them. Speaking to all levels of employees in the company and being interested in what they have to say made the individuals feel like they were more than an employee. Do you take the time to speak to any of your employees as you meet them? Do you know their names?

He worked like his employees at improving the company for the long term. Being a salesman, he sold the image of Chrysler everywhere. What are your best skills? Have you used them as intensely as you can to improve the company? Do you or your managers ever take the time to work a day alongside your employees to realize how hard the work really is? Don't be too proud to do the physical work. Your employees will respect you and the company for your efforts.

Being an employee of "the new Chrysler Corporation" started to mean something. What have you done for your employees? Are there clean

uniforms for all employees of the company? Do individuals feel good about working for your company? Have customers made comments about the quality of your employees?

Motivation of the work force needs to come from the top and be reinforced by every manager in your company. The higher the morale in a company, the higher the productivity of all employees. Keep your managers' attitudes positive and the feeling will spread through the company. In some instances, we have seen companies which have positive attitudes find that the total hours needed to service all of the customers shrinks. High morale in a company will also lead to fewer employee turnovers.

The Japanese and West Germans believe that productivity can be managed. But, in those countries,

By developing the work sequence and task split lists, you can achieve faster training time.

productivity is regarded by the individual as a personal responsibility. People and the organization are treated with great concern because they believe that "We must and will succeed." The success of these countries in increasing productivity and quality of work life must be judged in terms of their own principles, culture and lifestyle.

Peter F. Drucker said in *Managing in Turbulent Times*, "...the employee on all levels, from the lowest to the highest, needs to be given genuine responsibility for the affairs of the plant." Participative management may have developed in the manufacturing industries, but it is applicable to the green industries today.

Increased productivity must be addressed by all individuals in a company. Management should take the lead and be certain that the efforts are translated into meaningful actions once the course is identified. Here are some suggestions:

Bring your employees into your need for higher productivity. Seek their input. Implement it. Make your company the one customers want to provide their service and individuals want to work for.

You will hopefully reach your goal of employees coming to work for a company they really believe in and enjoy working for. **LM**

EMPLOYEE PRODUCTION

Hours on job	Productivity efficiency
Start to 4	100%
4 to 6½	75%
6½ to 8½	60%
8½ to 10	50%
More than 10	50%

Source: The author



Manhattan II helps smooth out the roughs at Inverness

INVERNESS CLUB, TOLEDO — Superintendent Tom Walker chooses Manhattan II to overseed roughs at this prestigious club because of its wear resistance, quick establishment, dark green color and drought and disease tolerance. But Tom finds Manhattan II's big plus is *density*. Manhattan II actually produces more leaves per plant, an economy sometimes overlooked.

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Late-season N improves turf quality all year

Research indicates a late-season nitrogen application improves turf quality year-round. This, according to Dr. John Clapp, agronomist with the Triazone Corp., speaking at the Southern Turfgrass Conference here.

"Late-season N on turf can prolong the fall/winter green-up period, increase root growth in the spring, decrease spring mowing, and improve the lawn's resistance to drought, disease, and weed pressure," Clapp says. "A dose of nitrogen in the late fall, after shoot growth has ended, helps keep the turf green until winter dormancy sets in. That eliminates the N deficiency that's so common by that time of year."

Timing—critical

"In the spring, green-up and root growth is promoted earlier, giving the turf a good start. That vigor pays off throughout the season in a stronger, denser lawn that is more resistant to insect and weed outbreaks."

"You have to be careful to time your application correctly," Clapp warned. "Apply your nitrogen after shoot growth has ended, but before the grass stops producing chlorophyll. That's usually when the temperature

Nitrogen applied too early could result in excessive topgrowth.

drops below 50°F, but before the turf turns brown."

He noted that nitrogen applied too early could result in excessive topgrowth, which drains carbohydrates from the turfgrass' reserves, making them more vulnerable to winterkill. If you put on your N too late, Clapp says, the lawn will only be able to use the nutrients in the spring, after it comes

out of dormancy.

Adjust rates

"Late-season fertilization isn't designed to add N to your program," Clapp explained. "You're not changing the amount of nitrogen you apply each year—you're simply adjusting the distribution times, applying more in the fall and less in the spring."

Clapp says research indicates that 1.0 to 1.5 lbs. N/1,000 sq.ft. is a good rate for late-season application. The other application rates should be reduced to avoid over-fertilization: Clapp recommends applying 0.5 to 0.75 lb. N/1,000 sq.ft. in the spring; 0.5 to 0.75 lb. N/1,000 sq.ft. in the early summer; and 0.75 to 1.25 lbs. N/1,000 sq.ft. in the early fall.

Too much late-season nitrogen causes excessive spring topgrowth and even mild cases of fusarium blight, Clapp warned, so don't exceed the recommended rates.

Controlled-release N works best for late-season application. Use a nitrogen source that doesn't rely on microbial activity, advised Clapp. He noted that using more traditional products for late-season fertilization can often lead to problems.

Urea, for example, has been found to leach out of the rootzone after late-season applications, particularly in sandy soils. Slow-release sources like IBDU and sulfur-coated urea are less prone to leaching, but provide a delayed response, so the applicator must do some guesswork in order to apply two to three weeks before the optimum time. For best results, Clapp recommended a nitrogen source like the patented triazone molecule in N-Sure nitrogen solution. Triazone's unique ring shape allows it to begin releasing nitrogen immediately, and continue feeding turf for weeks.

"A solution like N-Sure is ideal for late-season application because it spreads its nitrogen release over a long period of time," says Clapp. "It provides immediate visual enhancement, sustains the lawn into winter, and still provides enough nitrogen to provide better spring green-up."

"That makes a difference year-round. When grass comes up in the spring with good, healthy carbohydrate reserves, the pressures of weed infestation and disease decrease dramatically," he says.

LM

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Bark mulch: an excellent soil conditioner

Shredded bark mulch is commonplace in the landscape and nursery industries.

When trees are dragged from the woods to the sawmill, they accumulate mud and stones. By using a debarker, this cleans off the debris of the trees without marring the wood that is milled for lumber. This in turn keeps the mill cleaner inside, and extends the life of the saw blades. Bark mulch is then accumulated on the grounds of the mill.

How did bark work itself from lumber mills into our particular industries? Nurseries, always seeking better and more economical ways to grow their plant material, saw a use for bark in potting media. Why? Because it is relatively low in cost and has favorable properties. This idea spread from potting medium to soil conditioner and also for use as a ground cover.

Bark uses have expanded to include soft surfaces under playground equipment, jogging trails, fuel for generators and bedding for animals. The most recent development is composting bark mixed with sewage sludge for use as a soil conditioner, potting medium, and topdressing for flower beds.

From whence it comes

Sawmills located throughout the United States produce lumber from species native to their geographical region. Different types of bark are produced with unique characteristics.

Cypress bark mulch is derived from mills in the Southeast. The cypress tree grows mainly in Florida and Louisiana. Cypress, unusually red in color, is naturally resistant to rot and decay. This product will retain its color for longer than any other species of bark mulches. In many cases the whole tree is ground up and marketed as bark mulch to meet the demands for this product in the landscape industry. Cypress mulch is graded on the amount of wood content in the mulch. The gradings range from A (the best, with the least amount of wood content) to C (this not only includes wood content, but some sawdust).

The northern species of trees similar to cypress is the cedar family. This species grows in Michigan, New York and southern Canada. Its color is not as brilliant as cedar, but is reddish. Since it is also resistant to decay and



Bark mulch, such as this used at Edgell Communications headquarters in Cleveland, Ohio, is an excellent low-maintenance ground cover.

rot, it will last in flower beds for two to three seasons.

Another type of bark mulch available in the industry is pine. Many different species of conifers are used. Pine bark mulch can be very stringy and chunky. Many times it is mar-

The most common mulch comes from hardwood bark which is domestically produced and available in all the eastern and midwestern states.

keted in mini-nugget or regular nugget forms. Since this material does not break down as fast as a hardwood material, the nurseries use it as a space filler for container growing.

Most common

The most common and readily available bark mulch is hardwood. Hardwood bark mulch is domestically produced and available in all the eastern and midwestern states. Hardwood bark mulch incorporates many different types of deciduous trees. It is light brown when fresh. Because hardwood bark mulch can also be stringy and chunky, many

mills double-shred it to give a nice uniform size. Processed bark mulch breaks down much faster than the other types of mulch mentioned previously. The decomposition process turns the bark darker in color. This bark is the most popular in the landscape industry. The hardwood bark mulch fines (small pieces of mulch that fall through the screening material) are very useful for potting in container material.

Organic advantage

Bark mulch can be applied any time of the year. Spring is the most common, as flower beds are cleaned up and flowers are planted. One advantage of the bark mulch is that it is free of weed seeds and plant diseases. It is an organic material that decomposes to a humus and soil conditioner. It is safe and non-toxic. Bark mulch which has been spread around plants retains the soil moisture and enhances seed germination along with moderating soil and surface temperatures. This can help in the hot summer and also with frosts in the late fall.

One precaution to keep in mind is that aerobic and anaerobic decomposition occur. Heat is produced along with the possibility of a decrease in the pH. A way to remedy this problem is to let the heat dissipate from the bark. You can also help by watering the bark down and handling it with care around juvenile plants. **LM**

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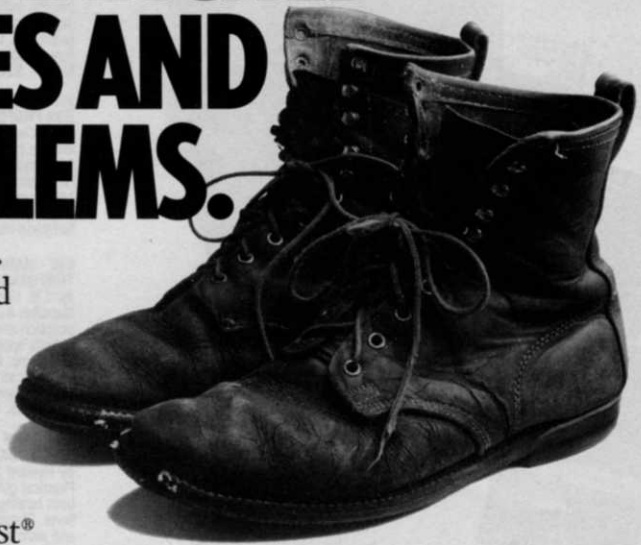
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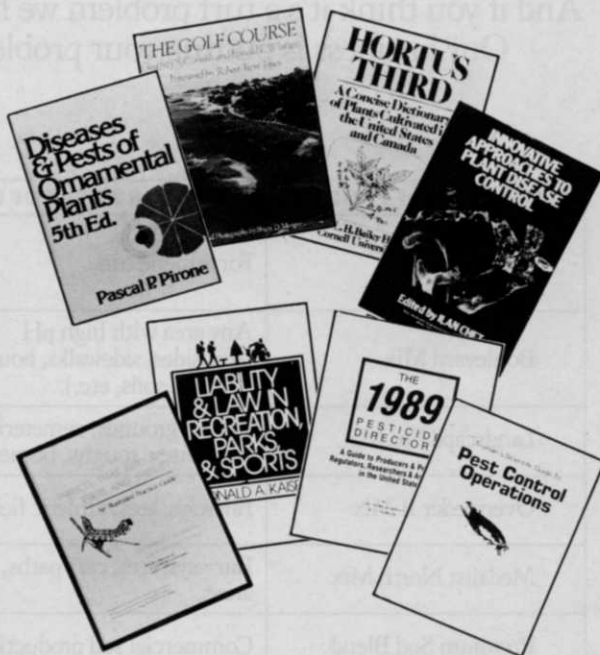
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