The Standard Defining Mowing Technology.

Now the rugged 322-D does double duty as a four-wheel drive model. Four-wheel drive gives you enhanced traction to tackle the steepest hills* and other conditions while minimizing turf tearing.

Toro's enhanced traction four-wheel drive is much more dependable than the two-wheel, differential lock type found on competitive machines. An on-demand overrunning clutch prevents against rear tire scuffing in turns, and a shift lever provides two- to four-wheel drive engagement or disengagement. Sixteen years of customer satisfaction have made the Groundsmaster 300 Series the standard against which other machines are measured. And now that we've raised the standard again by increasing mowing capacity and traction, you owe yourself a demonstration.

Just call your local Toro distributor or contact Toro at the address below.

Toro's enhanced traction four-wheel drive is much more dependable than the two-wheel, differential lock type found on competitive machines. An on-demand overrunning clutch prevents against rear tire scuffing in turns, and a shift lever provides two- to four-wheel drive engagement or disengagement. Sixteen years of customer satisfaction have made the Groundsmaster 300 Series the standard against which other machines are measured. And now that we've raised the standard again by increasing mowing capacity and traction, you owe yourself a demonstration. Just call your local Toro distributor or contact Toro at the address below.

Toro's enhanced traction four-wheel drive is much more dependable than the two-wheel, differential lock type found on competitive machines. An on-demand overrunning clutch prevents against rear tire scuffing in turns, and a shift lever provides two- to four-wheel drive engagement or disengagement. Sixteen years of customer satisfaction have made the Groundsmaster 300 Series the standard against which other machines are measured. And now that we've raised the standard again by increasing mowing capacity and traction, you owe yourself a demonstration. Just call your local Toro distributor or contact Toro at the address below.

TRAINING INSURANCE

Just because you’ve spent time and money training employees doesn’t necessarily mean they’ve learned anything. Here’s how to make sure they absorb new information to apply to their job.

by Lawrence Kokkelenberg, Ph.D.

Now that it is winter, training time is again upon us. Lawn and landscape companies all over America start training or send their employees to trade shows, conventions, conferences and seminars.

Employees attend these functions and when the spring begins, little—if anything—is different. In fact, the company may have done itself a disservice rather than the intended good that was hoped for.

Why has this happened? Because of a fundamental mistake: there is a difference between classroom learning and on-the-job performance.

When an employee returns from a training program, we assume the following:
1. The training was successful (learning took place);
2. That learning will translate into on-the-job skills;
3. That management or the company has little additional responsibilities.

Let’s explore these assumptions and find out how an organization can truly maximize its training dollars.

Lighting the bulb
In order for training to be successful, learning must take place. Learning implies understanding. Understanding is heavily dependent on the ability of the instructor to communicate and to some extent, the ability of the attendee to listen, focus and be involved.

Learning, unfortunately, does not always take place. In some cases, it takes place only minimally. To increase learning, the following actions are recommended:
1. Inform employees who are to attend what you expect them to learn. Tell them why they were selected and what expectations you have for applying what they learn.
2. Inform employees that when the training program is completed there will be a follow-up session within one week. Ensure that this follow-up session takes place. Inform employees that during this follow-up, they will have to make a 15-minute (or longer) presentation on what they remember from the program. This should either get them to pay more attention during the training, or at least make them review their notes.
3. Have all employees who were present in the training complete a true/false test or an exam after the training. This will reinforce the training session and ensure their learning.
4. Prior to the training program, ask the trainees to draw up a list of items they would like to learn while in training. The training is more exciting and more relevant when it is learner-requested.

All these things clearly help the employee prepare for learning. The employee will be more attentive during the program, and you will have done your part. The rest is up to the instructor.

Once learning takes place, it must have relevance to the employee’s job or it will quickly be forgotten. Immediate application allows for relevance and a critical and necessary opportunity to practice the new knowledge. An organization must do more than permit usage—it must foster, promote, and even demand that the employee’s new knowledge be used on the job.

Using new skills
What will the employee do differently? What ideas does the employee have as a result of attending the program? How does the employee think they will implement any of these ideas?

Questions like these encourage the employee to use these skills on the job.

Management, in order to receive the greatest return on investment for training dollars, must support the employee’s learning and practice. Support after the training program can come in many ways.

Once learning takes place, it must have relevance to the employee’s job or it will quickly be forgotten.

- Management can now make the employee’s new skills part of their performance appraisal.
- Management can send out six-week and six-month surveys asking employees if what they learned at training is still being used.
- Management can give additional responsibilities and authority to help these individuals use what they learned.
- Management can follow up employee learning to see if they are using any new skills.
- Management should always be a model.

Any company that merely sends its employees to a convention or training program, asks “how was it?,” and then returns to business as usual would do better to keep the money in the bank. Any company that trains its employees and then promptly forgets about the training—
Keep your reputation spotless.

Golfers may not know leaf spot by name, but it can mark the difference between your course and someone else's.

DYRENE® 4 Turf Fungicide has been effectively controlling leaf spot for years. And for every day of control you get, nothing costs less.

DYRENE 4. Proven control. Because we have a reputation to consider, too. For more information, contact Mobay Corporation, Specialty Products Group, Box 4913, Kansas City, MO 64120.

DYRENE is a Reg. TM of Mobay Corporation.
never following it up, assuming the employee has learned and retained the information—would also do better to keep the money in the bank.

The purpose of training is to develop new skills in the participants. Training in the classroom usually does not develop new skills. Learning that takes place in the classroom is only part of the training process. In the classroom, learning takes place because of the content, the success of the instructor, the attention and listening skills of the participants. Learning demands comprehension.

Making sure
Skills are developed through practice, feedback, job relevance, reward and recognition. These factors take place on the job, after the classroom learning has been completed. It is managers' and supervisors' responsibilities to make sure that learnings from the classroom become translated into on-the-job new skills.

To make training profitable:
- Select your people carefully and with purpose;
- Inform them in advance of your requirement and expectations;
- Review their learnings immediately upon return;
- Expect and plan for on-the-job performance translation/improvement;
- Follow it up in one or more ways for six months.

Are these guys learning anything? It may depend on whether or not their boss took the time to prepare them properly for the seminar.

that learning from the classroom become translated into on-the-job new skills.

To make training profitable:
- Select your people carefully and with purpose;
- Inform them in advance of your requirement and expectations;
- Review their learnings immediately upon return;
- Expect and plan for on-the-job performance translation/improvement;
- Follow it up in one or more ways for six months.

If we all do our jobs, training does pay and does translate into on-the-job performance improvement, lower turnover, higher productivity and higher quality. Training takes classroom time and on-the-job practice. Training can be costly, but then again, consider the cost of ignorance, turnover and callbacks.
WE NEVER STOP PUSHING FOR PERFECTION

More people find more reasons to get behind Ransomes Bobcat than any other mid-size mowers. Because we never stop getting great ideas for improving them. Like our new ultra-durable, double-wide belt for truly uninterrupted mowing. Or our exclusive quick-lock caster clips for dependable wheel security. For landscaping and grounds-keeping, remember; no one puts more new features on a wider selection of commercial mowers (32” to 54” cutting widths) than Ransomes. The best selling mid-size mowers in the world.

To see more great ideas, get started at your Ransomes distributor. Or call Ransomes, Inc., One Bob Cat Lane, Johnson Creek, WI 53038, (414) 699-2000.
Introducing new Pace®. The first Pythium fungicide so advanced it even cleans up after itself.

Each carton contains two water-soluble packets. The exact amount needed to treat the average size putting green.

Simply drop the two pre-measured packets into a half-filled spray tank, then discard the carton as you would any paper container.

Within two minutes, the packets are thoroughly dissolved. And all that's left for you to do is fill the rest of the tank and spray.

It's that simple. And that safe. Because all you touch is the outer carton itself. Not the chemical.

But once it touches your turf, new Pace delivers Pythium control never before
g at the most control ever invented.
age it came in.

seen in a single fungicide. Because a single fungicide it's not. What it is, is the first ever pre-mixed, pre-measured, and pre-tested formulation of a contact and a systemic. In trials at major universities, the synergistic, dual action of this combination proved more effective than any other Pythium fungicide currently on the market.

So if you've been waiting for a fungicide that not only takes care of Pythium, but also things like employee exposure and container disposal, it's finally here.

New Pace. Now at your turf chemical distributor.

© 1988 CIBA-GEIGY Corporation, Turf and Ornamental Products, Box 18300, Greensboro, NC 27419. Always read and follow label directions.

Circle No. 109 on Reader Inquiry Card
THE TRADITION CONTINUES...

Ordinances protecting trees date back 300 years in Newark, N.J. Under tree pioneer Carl Bannwart, more than 60,000 trees were planted in the city. Today that tradition lives on.

by Frank J. Sudol and Alvin L. Zach

One of the major areas of concern to residents of any municipality is the maintenance of street trees. In Newark, N.J., tree maintenance was once the largest area of citizen complaint. Over the past four years, however, the city has set a new standard for establishing a comprehensive urban tree management and implementation program.

The city today continues the tradition set by Carl Bannwart, its first urban forester. During the last three years, more than 20,000 trees have been pruned, all dead trees and all stumps removed, and more than 3000 new trees planted.

The tree management program was vigorously re-instituted late in 1984 when the city council contracted to provide a complete inventory of all street trees, park trees and to recommend planting sites.

Under the terms of the contract, the data collected was computerized and a comprehensive plan was developed for the city to use in caring for and replacing its trees.

The inventory included trees on public streets and in city parks. It contains information on location, number, size, species, condition, insect infestation, disease and other problems of the trees.

In addition, the location of each tree, by street address, block and lot, census tract and ward, as well as its genus and species, size (diameter at breast height), height to the top of its crown, maintenance needs and location in relation to overhead wires was noted.

Future tree planting sites were identified for the optimum planting of new trees, detailing the best species for particular areas.

The contract provided $46,125 for the inventory and $6,170 to train Newark employees to use the system. The remaining $3,470 was used to develop a "work data program" that allows the department to record work as it is done on trees to continuously update the initial inventory. This has provided a complete data base on Newark's trees. It also allows the city to compare costs between contractors, various tree species, tree locations and total expenditures on each tree care function such as removal and pruning. This work data program was recently revised by the city's computer consultant to make it more functional and to better meet the city forester's needs.

As data is accumulated, it is possible to evaluate the comparative cost of maintaining an American sycamore to that of a maple. Then it can be decided when it is no longer economically viable to maintain a mature tree. In addition, it can be determined the cost ratio for numerous smaller trees compared to the cost of a large over-mature tree.

Inventory updating is performed by the city's forester in order to sustain the value of the initial inventory.

While the trees in Newark County parks were not included in the city's inventory, it's important to note their significance. Newark is known as "Cherryblossomland" for the magnificent display of more than 3,000 cherryblossom trees in the 360-acre Branch Brook Park. It is one of the most famous in the world, exceeding even the Tidal Basin display in Washington, D.C.

continued on page 60
IF YOU DON'T BUY A SCAG HYDRO THIS YEAR, HERE'S WHAT YOU'LL BE MISSING.

Scag's new hydrostatic riders are engineered and built to perform better and last longer. No other hydrostatic rider gives you the high-performance features you get on a Scag rider.

Hydrostats are available with 40-, 48-, 61- and 72-inch decks and 12.5 to 20 HP engines. Scag also manufactures a complete line of commercial walkers from 32- to 72-inch cutting decks and 12.5 to 20 HP engines. See the complete line of Scag commercial mowers today.

- Scag's patented pivot-mount frame and zero-turning radius make maneuvering easier.
- Eaton Series 850 hydrostatic transaxle for smooth operation with just a touch of the foot.
- Scag-designed hydraulic cooling reservoir provides almost double the cooling capacity.
- Drive wheels driven by independent motors for a smooth transition through curves and better traction.
- Specialty-designed foot pedal reduces operator fatigue.

SCAG POWER EQUIPMENT

SIMPLY THE BEST

© SCAG POWER EQUIPMENT, 1989. ALL RIGHTS RESERVED.
TABLE 1. PLANTING SITE IDENTIFICATION

All planting sites for locations where trees should be planted were classified as marginal, small, medium or large and whether sidewalk or asphalt excavation is needed before tree planting. The following are minimum dimensions for planting sites:

<table>
<thead>
<tr>
<th>Computer Code</th>
<th>Site Size</th>
<th>Sidewalk Excavation Required</th>
<th>Minimum Distance to any Tree</th>
<th>Minimum Distance to Building</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGPS</td>
<td>Marginal</td>
<td>No</td>
<td>30 feet</td>
<td>6 feet</td>
</tr>
<tr>
<td>SPS</td>
<td>Small</td>
<td>No</td>
<td>30 feet</td>
<td>10 feet</td>
</tr>
<tr>
<td>MPS</td>
<td>Medium</td>
<td>No</td>
<td>40 feet</td>
<td>15 feet</td>
</tr>
<tr>
<td>LPS</td>
<td>Large</td>
<td>No</td>
<td>50 feet</td>
<td>20 feet</td>
</tr>
<tr>
<td>MGPS/EX</td>
<td>Marginal</td>
<td>Yes</td>
<td>30 feet</td>
<td>6 feet</td>
</tr>
<tr>
<td>SPS/EX</td>
<td>Small</td>
<td>Yes</td>
<td>30 feet</td>
<td>10 feet</td>
</tr>
<tr>
<td>MPS/EX</td>
<td>Medium</td>
<td>Yes</td>
<td>40 feet</td>
<td>15 feet</td>
</tr>
<tr>
<td>LPS/EX</td>
<td>Large</td>
<td>Yes</td>
<td>50 feet</td>
<td>20 feet</td>
</tr>
</tbody>
</table>

The following are additional specifications used to determine the presence of planting sites:

* All planting sites were at least 35 feet away from the intersection of curbs.
* All planting sites were at least 10 feet away from fire hydrants.
* All planting sites were located at least five feet away from any visible or identifiable underground utilities, signs, light poles, driveways or other permanent structures.
* The largest possible size classification was recorded for each planting site.

Defining work

By visual inspection, work needs and priorities were determined. The maintenance need was assigned based on a thorough visual examination of the tree by trained and experienced tree care experts. Each tree needing work was put into one of five categories: tree removals, safety trim, routine prune, safety clearance trim and prune to shape.

This data provided a basis for prioritizing trimming and removal needs. It assisted in developing accurate trimming forecasts. Definition of the maintenance groups are:

1. Tree removals. Trees designated as “removal” had one or several defects that could not be cost-effectively or practically corrected. Such defects included severe trunk decay and severely decayed or weakened V-crotches that could not be effectively called or gauged. The majority of the trees in this category had a major percentage of their crown dead and consequently were potential safety hazards.

Smaller trees (0 to 6 inches diameter breast height) listed as “removals” are usually those that have died as a result of transplant shock, vandalism, poor cultural practices or other causes.

2. Safety trim. Trees receiving a rating of “safety trim” are recommended for trimming to remove hazardous deadwood and/or broken branches. Most of the trees in this category pose a potential safety hazard which could result in bodily injury or property damage. These were further classified into two priority categories based on the potential for injury or liability:

a. Immediate priority: any tree with broken or hanging limbs, hazardous deadwood and dead, dying or diseased limbs or leaders greater than four inches in diameter that are in immediate danger of falling.

b. High priority: any tree with dead, dying, diseased or weakened branches between two and four inches in diameter that are a potential safety hazard.

3. Routine prune. Trees receiving this rating often have problems that have the potential of becoming safety hazards if not corrected in the near future. This includes trees with deadwood which presently pose little threat of bodily injury or property damage, correctible structural problems and/or growth patterns that would eventually obstruct traffic or interfere with utility wires or buildings. Routine prune maintenance needs were classified into two priority categories:

Trees receiving a rating of “safety trim” are recommended for trimming to remove hazardous deadwood and/or broken branches.