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But we're not standing still. Just last year, we ushered in a new era in pythium prevention with our new Chipco Aliette® fungicide—the first of a new generation of advanced chemistry to carry the Chipco name.

Naturally, products like these are only as good as the company that stands behind them. And nobody offers you more technical support than Chipco with our field force exclusive to turf and ornamentals.

In 1987, Chipco will introduce new formulations of three Chipco products. But we're not stopping. Exciting new products soon to earn the Chipco name are in various stages of development.

So when it's time to order your turf care products, remember Chipco, the company with the ongoing commitment to helping you care for your course.

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Please read labels carefully and use only as directed. Chipco 26019 FLO and Chipco Mocap 5G are not yet available for sale.

Circle No. 167 on Reader Inquiry Card
TRAINING SYSTEMS

Almost every organization or company needs some kind of system that will bring new employees up to productive levels efficiently. (The following steps are intended only for new employees, not as a format for management development.)

Much of the training we have seen throughout the green industries has been OJT (on-job-training). This type of apprenticeship training can be valuable if you have trained personnel who can give time to new employees, but it often results in lengthy, incomplete training.

In order to do a complete job of training your new people, you must go through several steps in order to make intelligent decisions about training.

1. Determine what skills or proficiencies are needed by the employee. By listing these specific needs, you’re starting a list of the types of training needed. Some companies aren’t able to write down job descriptions in a way that makes training possible. This step is the beginning point for all training, but it’s an often-overlooked step because it seems obvious to management.

2. Determine the order in which the various skills should be taught. Every job has a set of basics. If these deficiencies are taught first, the rest of the training process is much simpler.

3. Determine the skill of people you are going to train. Many companies using OJT as a training system waste valuable time because the employees are thrown into a work function without knowing if they have enough background to understand what they see others do. Simply having someone watch another do work doesn’t mean that people understand what they are seeing. You can use written or verbal questions to check on the information and skill level of people coming into the organization. When you know this, you can be effective at training those deficiencies that the people have and not make assumptions on backgrounds of your employees.

4. Determine the training resources in your organization. Some of your current people work extremely well as trainers, others do not. As the manager, you have to make an assessment of those people who do their job well and in addition are able to communicate how they do their job.

A caution here: some people do their job well, but do it “their way.” These might be extremely effective people from the standpoint of production, but they also might not be the people that you want to train new employees.

5. Determine methods of training. There are many ways to train people. Written materials, video tapes, OJT, programmed instruction, personal instruction, seminars and formal learning settings are among them.

6. Determine training costs for using the various methods. Two variables should be considered: how much will it cost, and how long will it take? The cheapest method may look good at first, but it may cost you money from a time standpoint. When you are paying an employee and they are ineffective in their work, it is costing you money. Look at the two variables side-by-side and you should be able to find a method that fits into your budget and a timetable for training employees.

7. Finally, determine how you are going to measure the results of the training. If you have a specific goal for the training, you should be able to measure its effectiveness. To check, issue written tests, ask questions, or observe tasks assigned the employee.

You must make sure that employees are aware of the intended outcome of the training. By doing so, you set clear, measurable training objectives. This will help them understand why the training is being done, and will give them reachable goals.

Without this final step you are simply training without either of the parties having a realistic way of measuring the effectiveness.

The training process can either be extremely formal or very loose in structure. In many green industries the latter is true.

If you are spending time and money to have your employees trained, you will have to spend time to prepare for that training, or its effectiveness will be unmeasureable and probably expensive. Once the training methods are in place, you should review them regularly to see if you are getting the results you expect. As you see the results of your training, the effort should be well worthwhile.
Your search for a high capacity mower encompassing a one man operation is now concluded. The Hydro-Power 180 with its 15 foot hydraulically driven rotary mower has a mowing capacity of up to 11 acres an hour while incorporating rear wheel steering for maximum maneuverability. Cutting units are designed for maximum floatation and may be used individually or in any combination of the three.

A foot pedal controlled hydrostatic transmission affords variable mowing speeds as well as transport speed to insure maximum travel time between the job sites. The Hydro-Power 180 offers year-round versatility with a 2-stage, 73” snow blower and heated cab.

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WITH LIMIT TURF REGULATOR IT'LL ONLY BE HALF AS CONSUMING. BECAUSE LIMIT SLOWS THE GROWTH OF GRASS* FOR SIX WEEKS OR MORE. GUARANTEED.

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Limit dramatically slows grass growth without unsightly yellowing. Because Limit works through the roots, not the foliage. So your grass stays green. Yet needs only half the mowings for the six weeks or more that the treatment lasts. And since you can use it before or after green-up, it always fits your schedule.

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There are a lot of things you'd rather have your ground crews working on instead of cutting grass. And with Limit, they'll have the time.

Use it on median strips, wooded areas, wet spots and bunkers. Anywhere that mowing and trimming time could be better spent elsewhere. The list is endless.

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Use it around plantings, foundations, monuments or hard-to-get-to areas. Your customers will notice and appreciate the other work you're doing even more. And you can take on more accounts for more profit.
VERSATILE AND RELIABLE.
Limit is recommended for ryegrass, bluegrass, tall and fine fescues. You can apply it with any standard spraying equipment. And you don't have to worry about rain wash-off. In fact, you can even use it as a way to keep personnel busy during moderate rain.

Plus, Limit can be tank-mixed with both fertilizers and commonly-used herbicides. So you get one-pass application efficiency on broadcast applications.

There's no overlap worries either. Limit is formulated to get consistent results even where application overlapping occurs. And it won't harm ornamentals or stain sidewalks, stones or monuments.

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THE EMERALD NECKLACE

The 19,000 acres of Cleveland's Metroparks System provide a challenge even for 350 peak-season workers.

by Carl Kovac

Keeping Greater Cleveland's "Emerald Necklace" sparkling is mostly a case of "if it ain't broke, don't fix it."

It's not an easy job, considering that the "necklace," known officially as the Cleveland Metroparks System, consists of almost 19,000 acres of rolling, wooded hills, valleys and open fields in 12 reservations draped around the eastern, southern and western fringes of Cuyahoga County.

Worked into this scenic strand are more than 100 miles of park roads providing access to wildlife management areas and waterfowl sanctuaries; picnic areas and playfields; hiking, bridle, all-purpose and physical fitness trails; six golf courses; swimming and boating areas; stables; tobogganing, sledding, skating and cross-country skiing areas and four nature centers.

"Our aim is to preserve and enhance the natural environment," explains Mark Oesterle, superintendent of parks for the Cleveland Metroparks, who oversees some 150 full-time workers and approximately 200 seasonal employees.

Wanted: weeds

Weeds are left pretty much alone throughout most of the system. Some weeds, in fact, add to the necklace's glitter. For example, the July edition of The Emerald Necklace, the Metroparks' monthly newsletter, tells readers that "Joe-pye and common milkweed both unfold pale purple blossoms this week. Take time to smell a milkweed—a pleasant surprise!" and "Enjoy the summer woods as we search for wildflowers and weeds that bloom (this month)."

"We don't try to keep any of our grassy areas totally weed-free; we're not concerned with it," Oesterle reports. "We do some weed control, mostly around parking lot posts, road delineators and sign posts, and along bridle trails. String Trimmers have been such a big help. We use chemicals, like Roundup, only in areas where we need longer kill periods. About the only other chemicals we handle are in the swimming pools."

Oesterle explains that Metroparks uses Stihl string trimmers for the most part because "we have found them to be light and durable and easily used by inexperienced seasonal employees. We can drop off a couple of seasonal people, accompanied by a worker on a riding mower, and together they can clear a large area in a relatively short time. The mower cuts six-foot swaths and the String Trimmers trim around trees, picnic tables, buildings, signs, and so on."

Grassy areas are seeded

Last year almost 400,000 golfers played at the six Metropark Golf Courses, including this one, Big Met.
Until now, there's never been a utility vehicle designed and built specifically to meet your turf-care needs.

But now there's the Cushman Eagle.

The Cushman Eagle is not a converted golf cart. It's not a redesign. It's a revolutionary new turf utility vehicle that sets a new standard of performance.

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The Cushman Eagle is the kind of rugged, reliable vehicle you've come to expect from Cushman, the leading manufacturer of cost-efficient time savers. A comparison will convince you of its performance. The price will convince you of its value.

Test drive one at your Cushman dealer today or call for more information. You'll see that nothing else works as well or looks as good as the new Cushman Eagle.
estimated cost of about $100,000 per hole, was begun last fall. The project includes leveling hills and removing trees and brush. When completed in early 1988, Shawnee Hills will have an 18-hole, par-72 course approximately 6,316 yards long; the official length will be set by the Professional Golfers’ Association (PGA). The 1,323-yard nine-hole executive course will remain unchanged.

“We keep the courses in as good shape as possible,” says Blatnick. “We water fairways on the 18-hole courses, we fertilize the tees, fairways and greens on a regular basis, and we use chemicals to curb crabgrass and insects. We normally don’t seed. But bent, the fescues and perennial ryegrasses are used when we have to.” His crews use triplex and gang mowers to keep the courses trim.

Pre-emergence chemicals are used in the spring for crabgrass control; contact leaf herbicides are sprayed or applied with spreaders in the spring and fall; and fungicides are used as needed, Blatnick says. Insecticides to control white grubs and ataenius beetles also are used.

Overlapping species

In addition to grasses, weeds and a wide variety of shrubs and wildflowers, the Emerald Necklace also boasts more than 100 species of trees, tended by a small forestry crew headed by natural resource specialist Joan Pfingsten.

“Because of our geography and climate, we’re really in an interesting position here,” she says. “Many of the species overlap geographically. We have aboreal forest trees found in Canada, and we have flood plain forests in addition to beech, maple and oak trees native to this area.”

Pfingsten says that “we do an awful lot of planting in the spring and fall. We have eight nurseries—well, actually 7½. The deer are working on one harder than I am.

“We employ selective release,” she reports. “We feature certain trees along certain trails, for example, depending on the season. This way, we keep the park roads looking attractive. After all, it’s the first thing people see; it’s a first impression.”

All of the people who keep the Emerald Necklace shimmering are apparently doing the right things. Last year, more than 21.5 million visitors took the opportunity to bask in the radiance of the necklace’s gems.

LANDSCAPE PROFILE

Picnic tables are anchored on crusher-run gravel pads to facilitate mowing the surrounding grass.

periodically with Park mix: one-third bluegrass, one-third red fescue and one-third perennial rye. “Some heavily-used places, like picnic areas, wear down faster than others. What we’ve been doing over the past five years is choose three to five of these areas at a time and go in with special crews who rototill the ground and seed it.

“We’ve also been building table pads in picnic areas,” he continues. “We strip the topsoil, then use crusher-run gravel to build a mound six inches above the surrounding grade. The mound is rolled and picnic tables and a grill are anchored in place. The grass around the pad is then brought to the edge. The advantage of this is that mowers can move around the pads, close to the tables, saving a tremendous amount of time.”

In addition to approximately 80 string trimmers, the Metroparks also use riding mowers, most of them Cushman models with six-foot front-mounted cutting decks, for fine cutting in picnic and other grassy areas. Ford tractors pull flail mowers over large fields. “Each reservation probably has 20 to 24 riding mowers plus a tractor,” Oesterle says. “The tractors also are used for raking and other chores in the winter.”

Busier than most

Maintenance personnel at the Metroparks golf courses also follow the “if-it-ain’t-broke” philosophy. “We don’t do anything different here than other courses do, except that we’re probably busier,” says Frank Blatnick, the system’s superintendent of golf courses.

Last year, 389,607 players took on Big Met, Manakiki, Sleepy Hollow (all 18-hole courses); Little Met and Mastick Woods (each nine-hole); and Shawnee Hills (which has a par-27, nine-hole executive course, a regulation par-36 nine-hole course and a driving range). Interestingly, senior citizens accounted for 21.8 percent of total play at the Metroparks courses in 1985.

Construction of an additional nine holes at Shawnee Hills, at an estimated cost of about $100,000 per hole, was begun last fall. The project includes leveling hills and removing trees and brush. When completed in early 1988, Shawnee Hills will have an 18-hole, par-72 course approximately 6,316 yards long; the official length will be set by the Professional Golfers’ Association (PGA). The 1,323-yard nine-hole executive course will remain unchanged.

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Frank Blatnick, superintendent of Cleveland Metroparks’ six golf courses.

Mark Oesterle, superintendent of the Cleveland Metroparks System.

WEEDS TREES & TURF/February 1987
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Circle No. 109 on Reader Inquiry Card
CLEANING MISS LIBERTY'S HOUSE

Landscape restoration on Liberty and Ellis islands in New York Harbor was not an easy assignment last year. But the National Park Service was up to the task.

by Robert L. Tracinski

When the U.S. government closed down Ellis Island on November 29, 1954, personnel walked out of their offices and away from the immigration center that had processed 16 million immigrants in 62 years.

They didn’t take so much as a file folder with them.

They just walked away.

So when the National Park Service took over Ellis Island in 1985, its staff found paper in the typewriters and calendars left open to November 29.

And they found an overgrown jungle in what used to be the parks and gardens of Ellis Island. A jungle that had to be cleaned up—virtually one branch at a time—over a period of nine months, in time for the historic Statue of Liberty rededication ceremonies over the July 4th weekend.

“We had to do everything by hand because we didn’t want to risk destroying any artifacts that may have been hidden by all the vegetation,” says Chuck Pellicane, chief of maintenance for Liberty and Ellis Islands. “We had a forest in the mall area behind the administration buildings on the Island—everything from pear trees to Virginia creeper to poison ivy.

“It was so dense that you couldn’t walk through there. We discovered a softball field, park benches, concrete park lights and a maze of sidewalks.”

The job was so massive that a full-time crew of 10 Park Service employees and dozens of part-time volunteers worked from October to July.

“If I didn’t have to worry about the artifacts, I could have done the whole thing in one week with one bulldozer,” Pellicane says.

The Park Service crews used chain saws, stump grinders and wood chippers to turn the five-acre forest into a presentable area. “We cut down literally hundreds of trees—all by hand” — Pellicane.

Robert L. Tracinski is consumer information specialist for John Deere & Company

so we could save the healthy vegetation,” Pellicane notes.

Once the wood chip mulch nourishes the soil, the Park Service will plant grass in order to create an area on the island where groups can hold ethnic festivals. In fact, the Park Service plans to call it the Festival Lawn.

Part of the effort to restore the Statue of Liberty included a new landscaping design to focus attention on the Statue. A line of trees along either side of the entrance to the Statue draws the eye directly to Miss Liberty. A ring of trees around the base of the Statue blocks out the New York City skyline as people approach the entrance. New grass, trees, shrubs, plants and groundcover were installed as part of the new design, including 5½ acres of sod, nearly 200 trees, 440 shrubs, 55,075 ivy plants as groundcover and 5,150 narcissus bulbs.

All that new greenery means that the Park Service uses a lot of chain saws for pruning and leaf rakes to pick up fallen leaves from 200 trees.

Kentucky bluegrass was planted on Liberty Island because of its ability to grow well in the shade. Pellicane said sod was laid rather than planting grass seed because “there wasn’t enough time to plant seed on Liberty Island. The contractors were laying sod on Liberty Island until midnight on the third of July.”

Contractors remain on Liberty Island finishing up the last details on the restoration project. Once they leave, Pellicane says he plans to start a motor pool division with a shop set up to service the equipment.

“We want to set up a good preventative maintenance schedule,” he says.

Pellicane joined the National Park Service in 1974 as a maintenance foreman at Gateway National Recreation Area, which encompasses 26,000 acres of land and water in Brooklyn, Queens and Staten Island, N.Y. and Sandy Hook, N.J.

The maintenance crew for Liberty and Ellis Islands consists of 40 people in two divisions: 14 in Buildings and Utilities and 26 in Grounds.

The Grounds Division is responsible for picking up and burning garbage, cutting and watering the grass, and cleaning inside the buildings and the Statue. Four people in the Grounds Division spend all day, every day, from 8 a.m. to 4 p.m., seven days a week, from April to October, cutting the grass on Liberty Island. One maintenance worker spends all day cutting the grass on Ellis Island.

Each day, the staff arrives on Liberty Island on a 7:30 a.m. boat from Battery Park in lower Manhattan. They start their day by picking up the garbage left by the crowds.

“There’s so much garbage here now that everyone has to spend time picking it up. Even the mowing operators are out there with a ‘pickstick,’ because you have to clear the grass before it’s safe to mow it,” Pellicane notes.

At the end of the day, the mowing crew shuts down at about 4 p.m., 30 minutes before the end of the work day, to hose down the equipment.