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DECEMBER 1974

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containing water insoluble nitrogen from
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WEEDS TREES and TURF®

December 1974, Vol. 13, No. 12

THE COVER—These two diesel rigs belong to Instant Shade Trees, Inc., a Texas corporation owned by Albert H. Korenek which provides large tree moving service across the continental United States. In addition to his trucks and ten hydraulic tree diggers, Korenek also cultivates 75 acres of oaks. See story on page 10.

INSTANT SHADE TREES . . . TEXAS STYLE—Geneology of tree spades is traced back to Al Korenek's attic where he invented the granddaddy of all mechanical tree diggers, the Texas Tree Shovel. Korenek tells his story from conception of the idea to completion of the popular diggers **10**

THE ARBORIST'S INSURANCE MARKET—National Arborist Association-approved Fred S. James and Company's Stanley Loar takes a look at the insurance options open to the arborist. Loar outlines alternatives to high cost, low dependability insurance **14**

MOTIVATING THE TURNED-OFF EMPLOYEE—Part 1: The Needs of Man—Few managers deliberately demotivate employees. But there are also very few who understand just what makes an employee tick, what his goals are within the work environment, what makes him dedicated and hard working. In this first of a series, John L. McKeever discusses the employee's goals, manager's role and employee's expectations from management **18**

MEET THE ASSOCIATIONS—Backbone of the Green Industry—Thirteen green industry organizations review their 1974 accomplishments and look ahead to their goals for 1975 **31**

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***“It’s fall. How come
the turf isn’t turning
like the trees?”***

***“His turf never
changes color.”***



As a professional golf course superintendent, green is the only color for your turf, no matter what the season.

And green is what you can get if you follow the DuPont TERSAN® 1-2-3 Disease Control Program. It’s effective, economical and complete—controls all major turf diseases on all turf grasses all season long. The third step of this program—the one to follow right now—is the application of Du Pont TERSAN SP on tees, fairways and greens. TERSAN SP zeros in on Gray Snow Mold and Pythium—the diseases that can be a major problem most any time of the year but particularly during autumn and the early winter months. (depending on your area) TERSAN SP, applied as directed, stops these turf diseases before they have a chance to damage your playing surface. (Applications of Du Pont TERSAN 1991 turf fungicide should be used in the late fall and early spring in areas where Pink Snow Mold is a problem.)

The TERSAN 1-2-3 Disease Control Program is a management tool you can depend on to do an outstanding job while keeping time, labor and costs at a minimum. So when members or officials of your club talk turf, they’ll be saying the kind of words you want to hear. For details on the TERSAN Program and a supply of TERSAN fungicides, see your golf course supplier.

With any chemical, follow labeling instructions and warnings carefully.



TERSAN 1-2-3 DISEASE CONTROL PROGRAM

For More Details Circle (116) on Reply Card

Much of the food crisis data we are being subjected to can be classed as nonsense. But we are aware that people who are starving need help. Our problem is how help for them affects our industry.

"Golf courses vs. food" is a ridiculous statement, but a most powerful slogan — and one we now have to deal with.

The American people may not prove so gullible this time as they were during the "oil shortage" and the general problems which were created as a direct result. Also, we now have the sugar crisis. All this may just cause Americans to analyze and consider the facts a little more carefully.

Our task — as organized groups within the green industry — is to get facts to the American public. We need action committees — using the best minds in our industry — to assemble data which will quickly show the need for maintaining the green in our field.

Basically, we need to show the value of trees and turfgrasses as bulwarks against pollution. We need to review for people the life support data associated with the

"Keep America Beautiful" type of vegetation.

Further, we need to review the history of the fertilizer industry — how companies were forced a few years ago to shut down fertilizer plants because of overproduction; and the fact that in a short time the fertilizer market, if the need exists, can again be inundated with product.

Also, we need to point out that at one time not too many years ago, the food (mostly wheat) we were sending India to solve their starvation problem was in excess of their dock facilities to handle it. Further, we developed educational programs to help India (and other underdeveloped countries) with university personnel and training curricula to aid in increasing food production. The Indians kicked us out.

Nevertheless, starving people need food. And some way, we in this country will help get it to them. If we handle the situation intelligently, we can have both "golf courses and food."

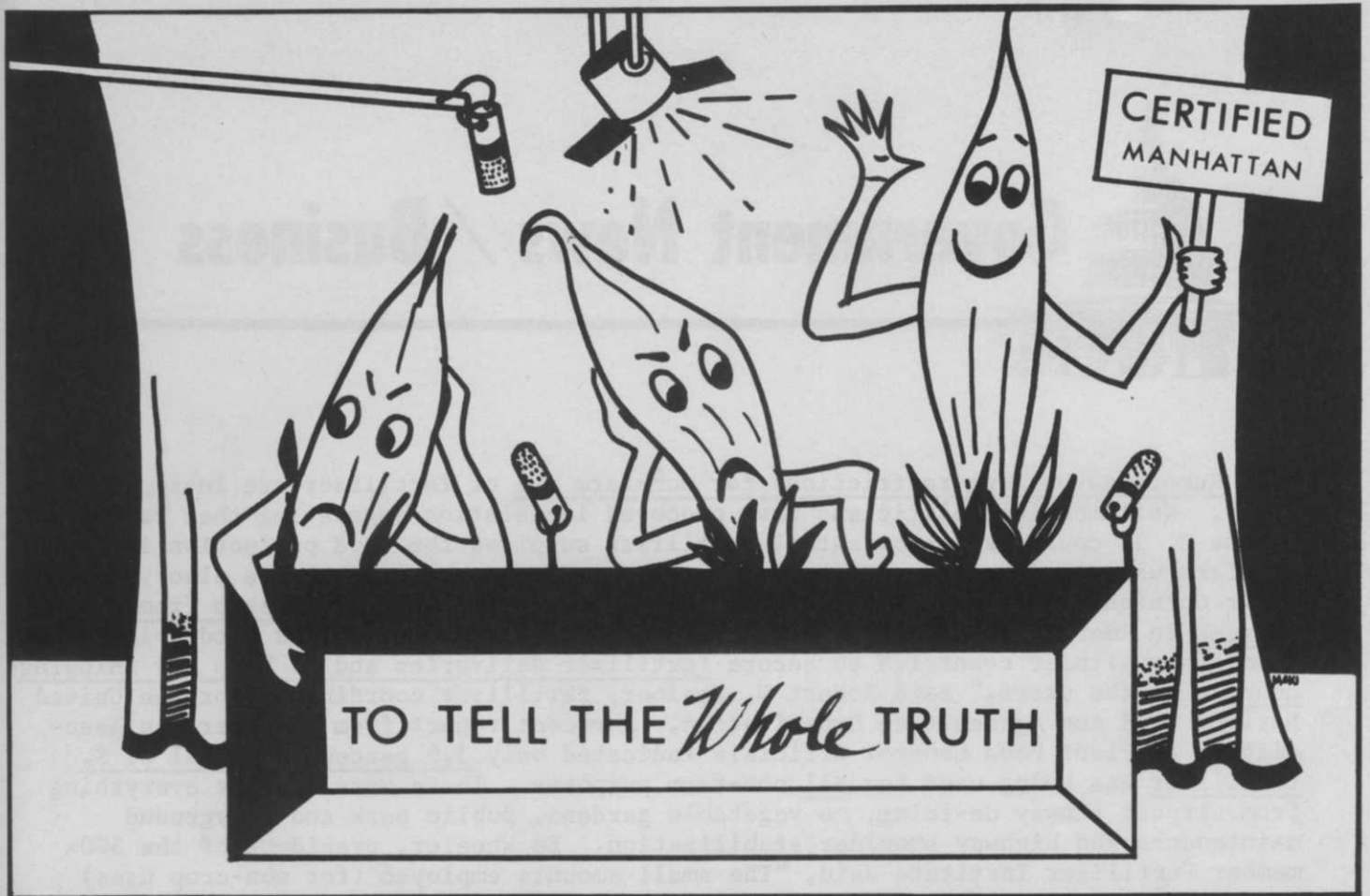
We, as publishers, are interested. We will welcome your ideas on meeting this latest crisis. A.E.

Announcing the new Asplundh "Whisper Chipper" Looks the same — sounds so different!

This new unit has all the dependable features of our famous chipper line. However, there is a remarkable difference — a great reduction in noise. Modification kits will be available for many existing models. **Asplundh Chipper Company, a division of Asplundh Tree Expert Co., 50 E. Hamilton Street, Chalfont, Pa. 18914**

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Manhattan perennial ryegrass is a fine textured perennial ryegrass developed by Dr. Reed Funk, Rutgers University. This new, improved, fine textured grass is genetically pure and great care is taken by Manhattan Association growers who plant only foundation seed stock. The seed is produced by members of the Manhattan Ryegrass Growers Association who agree to strict rules of growing, to protect the crop from cross-pollination and other contaminants.

The seed produced by these growers is closely watched and both field certification and seed certification are required before the seed is released to you, the customer.

Any seed bearing the name "Manhattan" but which does not carry certification tags may not be truly Manhattan. The variance could be drastically untrue of variety.

For your protection — buy only Certified Manhattan; why take a chance on imitations?



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PERENNIAL RYEGRASS

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For More Details Circle (145) on Reply Card



Government News / Business

Rumors advocating restrictions for non-farm use of fertilizer are increasing daily. Well-meaning politicians have proposed legislation suggesting that farmers in the U. S. could gain substantial fertilizer supplies for food production if non-farm use was diverted. Fortunately, some common-sense experts are also voicing their opinions. "It is unrealistic to talk about fertilizer being taken from golf courses in America to supply farmers in developing nations. What is needed is funds from the wealthier countries to secure fertilizer deliveries and to help pay shipping charges to the users," said Robert W. Steiner, fertilizer coordinator for the United Nations Food and Agriculture Organization. A recent report from the American Association of Plant Food Control Officials indicated only 3.5 percent of total U. S. fertilizer was being used for all non-farm purposes. These uses include everything from airport runway de-icing, to vegetable gardens, public park and playground maintenance and highway shoulder stabilization. Ed Wheeler, president of the 300-member Fertilizer Institute said, "The small amounts employed (for non-crop uses) contribute not just esthetic enhancement to our environment, they make a necessary functional addition to it, as well."

Senate has rejected an appropriations bill amendment, by a 60-to-29 margin, that would have exempted firms with 25 or fewer employees from OSHA coverage. The house has previously passed a similar version of the amendment. The bill now goes to a House-Senate conference where a final decision must be worked out.

Rhodia, Inc., has changed the name of its Chipman Division to Agricultural Division. Rhodia acquired the Chipman Chemical Company in 1964.

Sandoz Inc. Crop Protection, Homestead, Florida, has acquired Komeen Aquatic Herbicide and K-Lox Algaecide from Kocide Chemicals Corporation, Houston, Texas. Komeen is a copper compound for control of Hydrilla. K-Lox is for use in lakes and ponds.

In other industry acquisitions, Toro Company recently signed an agreement in principle to acquire the stock of Irrigation and Power Equipment, Inc., Greeley, Colo., a manufacturer of center pivot irrigation systems marketed under the Raincat trade name. Purchase of the company would involve an exchange of stock and be treated as a pooling of interests.

Beginning January 1, 1975, employers will be required to record occupational injuries and illnesses on a revised form that distinguishes two types of lost-work days--"days away from work" and "days of restricted work activity." "Days away from work" are defined as any days on which an employee would have worked but could not because of occupational injury or illness. "Days of restricted work activity" are any days during which an employee was assigned to another job on a temporary basis, or worked at his job less than full time, or worked at his regular job but could not perform all duties connected with it because of occupational injury or illness.

A burst of brilliance... Fylking for the World's Fair!

Fylking Kentucky bluegrass is a superior, elite bluegrass that burst like a star on the scene in the sixties!

Since then Fylking has established records making it the perfect choice for the official grass at the environmental World's Fair, Expo '74.

Fylking has proven to have superior resistance to disease and drought; withstands traffic. Its thickly woven rhizome root system develops dense sod so quickly Fylking can be lifted in 90 days. Fylking can be mowed at 3/4 inch (even 1/2 inch) and thrive. It absorbs carbon dioxide pollutants, gives off oxygen, cools air by releasing water vapor.

A superior mixer, Fylking greens up earlier in spring, stays greener in summer heat, remains green longer into fall.

Choose Fylking and your customers are getting a grass good enough for a World's Fair!



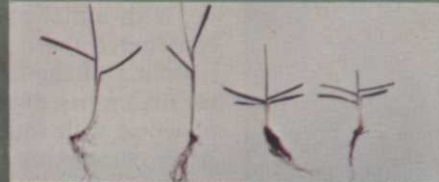
FYLKING KENTUCKY BLUEGRASS

U. S. Plant Patent 2887

Another fine product of Jacklin Seed Company



Fylking's rhizome root system develops so thickly, under ideal conditions sod can be lifted in 90 DAYS.



Low growth, short leaf sheaths and abundant tillering of Fylking (right) compared with another elite bluegrass plant.



Cross section displays thick, luxuriant turf, fine leaf texture and brilliant green color of Fylking.

INSTANT SHADE TREES...

TEXAS STYLE

By ALBERT H. KORENEK

ALTHOUGH mechanized moving of trees grows more common and popular each year, few realize the original development of Vermeer-type hydraulic diggers grew out of a classroom assignment and years of home shop experimentation.

After returning from military service in 1953, I went back to college and began night school graduate studies at the University of Houston. One class assignment was to research some type of small business and to make recommendations for its improvement or expansion. Since I grew up on a farm, a report on a business relating to some type of farming seemed most interesting. My father had sold native oak trees from our farm and I had grown trees from acorns, so I chose to do a study of one of the largest tree service companies in Houston, Tex. This company hand dug and transplanted sizeable quantities of large trees all over southern Texas. One thing difficult to understand was the company looking for trees and hauling them from as far away as Mississippi and Louisiana. I immediately saw the possibility of growing trees locally which would be close to market and save "hunting for trees" several hundred miles away and expensive hauling. The ten-page report yielded a good grade and, more importantly, it sounded so convincing that I soon began planting trees in my spare time in anticipation of some day being in the tree business.

With initial plantings made and trees growing, it wasn't long before I confronted the hardest part of business in large trees: the digging and handling of the large ball of earth. In 1962, I began building a model of my dream tree digger in our old farmhouse attic. This first model was built of plywood with four flat blades forming an inverted pyramid-shaped ball. After completing the model, I tried to hire Bill Peltier, a Danbury, Tex. welder and fabricator, to build a machine from the model. He was too kind to laugh at me, and refused to build the machine saying I'd only be wasting money because the idea wouldn't work even if built.

This idea laid in limbo for two years and then while recuperating from surgery, I had lots of time to mentally redesign and rebuild my "Dream Machine." With a new round blade design and a new model, I went back to Peltier and showed him how well the little model worked. He still wasn't completely convinced that the "gizmo," as he called it, would work. However, after much assurance that I would pay him for his efforts even if the machine didn't work, he agreed to build the machine in his spare time if I'd be there to help.

(continued on page 29)

Ugly, but Economical!



Model 84

If appearance is your prime consideration, better think about another mower.

If economy and quality is what you want — you want a National Mower!

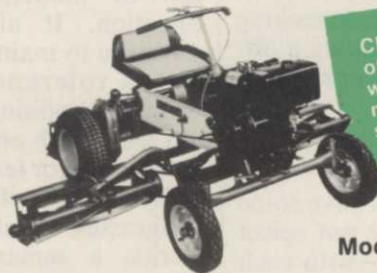
In today's economy, one of the most difficult engineering tasks is to produce a completely functional and easily maintainable machine with a minimum number of components. *We've been doing just that since 1919.*

In addition, we skimp on styling in order to lower initial price and to build mowers that give you years of extra service.

Rather than adding fancy shrouds, shiny hubcaps and frills, we concentrate on providing mowers with maneuverability and superb performance on banks and hillsides. For better quality, we use Timken bearings; automotive-type transmissions and heavy-duty, tubular steel frames. Reels adjust down to fixed bed bars providing for more rigid and longer lasting mowing units. Bed knives have turned up lips for extra wear... *a feature we introduced as early as 1925.* For professional results, National's three power-driven, free-floating reels follow ground contour and cut without skip or scalping.

Chrome accent strips don't add to serviceability,

so we don't use them. National's no-nonsense design makes normal service faster than any mower on today's market.



Model 68

Check out the economies of these ugly beauties... we've been adding nothing but quality since 1919.

WRITE for detailed literature on all National Mowers



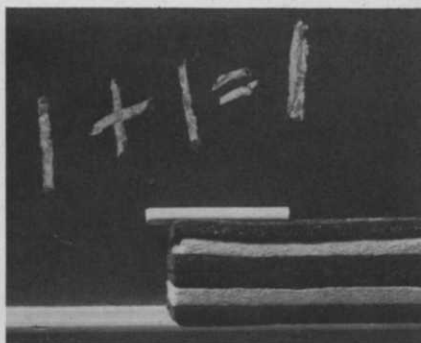
NATIONAL
Mower Company

660 Raymond Avenue • St. Paul, Minnesota 55114
Phone: 612/646-4079

For More Details Circle (106) on Reply Card

Northrup King introduces a new Kentucky Bluegrass concept:

Aquila/Parade. working as one perfect blend



The Northrup King formula for the nearly perfect Kentucky Bluegrass: 1 + 1 = 1. That's two superbly compatible bluegrasses—Aquila and Parade—working as one to create an outstanding blend component.

For a long time, turf researchers have been looking for the “perfect” Kentucky Bluegrass. They haven't found it. They've come up with some excellent varieties but not that one perfect cultivar.

Northrup King has been seeking perfection, too. And, taking a different approach, we think we've come very close to it.

Perfection, a team concept.

Since all known grasses have some sort of weakness, why not select a *team* of two grasses—with each member of the team possessing compensating strengths—and blend them in a way that's practical for use by turf professionals? This is precisely the approach Northrup King has taken.

For ten years, our researchers

have sought two superior and superbly compatible Kentucky Bluegrasses to form a high-performance, low-maintenance “blend-within-a-blend”. In Aquila and Parade, we've found the pair we've been after. Let's look at these two grasses, first as individuals and then as the Northrup King team of Aquila/Parade.

Aquila for persistence.

Bluegrass turf that's been established for three to five years tends to require significantly more maintenance in order to keep it dense and healthy. Aquila Kentucky Bluegrass provides a striking exception to this fact of turf life.

Once established, Aquila holds its density and color and maintains a healthy weed-resistant stand for longer than five years, even under low or moderate nitrogen fertilization. It also requires less moisture to maintain its color and shows tolerance to moderate drought conditions. It has a medium leaf width and attractive dark green color for textural and esthetic compatibility with a wide range of turfgrasses. Aquila is, on its own merits, a remarkable Kentucky Bluegrass. And we've teamed it with another:

Parade for durability.

The particular strength of Parade Kentucky Bluegrass is that it develops a tough sod fast. It with-

stands traffic better than many bluegrasses and can recover quickly from injury, making Parade excellent for athletic fields, golf courses, fairways and other high-traffic areas. With its pleasant dark green color and moderately broad leaf width, it's compatible with many turfgrasses. In combination with Aquila, it forms a nearly perfect blend component.

Aquila/Parade: low maintenance, high performance.

Together, Aquila and Parade give you a bluegrass component with more advantages than any single cultivar we've ever seen or heard about.

The Aquila/Parade team requires moderate amounts of fertilization, water and general care—factors that should help your maintenance budget considerably. Yet, in concert with other grasses that meet your requirements, Aquila/Parade will provide a uniformly attractive turf that establishes early and lasts straight through into fall. This blend component will also stand up well under traffic and give you good disease protection.

Aquila/Parade is ready. Now how do you use it?

Northrup King is committed to the blend concept, as are many turf experts today. Our experience convinces us that a good com-

Two bluegrasses to form a nearly component.

combination of grasses will give the best performance. So we look upon Aquila/Parade as a component to be blended with rye, fescues, other bluegrasses and/or whatever your particular conditions warrant. And, we'll gladly help you formulate the proper blend.

If you'll fill out the form below, we'll give you our professional recommendation as to the best blend, using Aquila/Parade as a component. We hope you'll take us up on this offer, because we think the Aquila/Parade team is the most important Kentucky Blue-

grass concept to date—as close to perfection as anybody's been able to get.

AQUILAPARADE
KENTUCKY BLUEGRASSES

Northrup King will recommend a blend, using Aquila/Parade, customized to your specific needs.

Just fill out this form and send it to Aquila/Parade, Northrup King & Co., 1500 Jackson St. N.E., Minneapolis, MN 55413.

Name: _____ Title: _____

Club or Company: _____ Phone No.: _____

Address: _____ City: _____ State: _____ Zip: _____

For: New turf Interseeding established turf Renovating old turf

Use: Prestige turf Utility turf Athletic or heavily used turf Background turf

Other _____

Area to be seeded: _____ Approximate planting date: _____

Soil type: Sandy Loamy Clay Peat Soil condition: Droughty OK Wet

Fertility Level: _____ pH Acid Neutral Alkaline

Topography: Steep Rolling Level Light: Sunny Partial shade Heavy shade

Disease and insect problems encountered: _____

Intended management: Intensive Moderate Low

Irrigated Non-irrigated

Mowing height: _____ Frequency: _____

Fertilizer program: _____



The Arborist's Insurance Market

By STANLEY LOAR
Mass Marketing Coordinator
Fred S. James and Company

THE ARBORIST as a businessman is faced with the task of protecting his firm's assets and in providing longevity to his firm's profitability. Often forgotten is the many U. S. firms in any industry which go bankrupt as a direct result of some loss against which there was insurance coverage available. How many times have lawsuits, fires, embezzlement or some other loss forced companies into receivership or caused them poor results on their profit and loss statement? Often precautions could have been taken against this economic loss, but due to oversight or ignorance, the precautions were not taken.

Known vs Unknown

Insurance costs are a tax deductible expense for running a business. This expense, or insurance premium for a given period, is fixed and known. On the other hand, property losses or court settlements which are also tax deductions, are the losses over which a businessman or owner has no control as far

as frequency, severity or timing at which these losses may occur. One really trades a known cost, i. e., the insurance premium, for some unknown costs, i. e., uninsured losses. The prudent businessman should be attempting to stabilize his business earnings to ensure his firm's future profitability. Therefore, to risk a known cost for some unknown, possibly catastrophic cost, makes the latter seem like gambling. This is not the way to run a business.

Proper Coverage

One may ask himself — what exposure do I have? What kind of losses should I insure against and what should I pay? Of course, the obvious and often neglected risk of loss to any business is present whenever automobiles are involved. Catastrophic losses, which we all read about in the press, where court costs and settlements reach seven-digit figures, make one wonder if he shouldn't go back to the horse and buggy. This type of loss is not all that uncommon. It is my impression

most people do go through the motions of buying auto insurance, but unfortunately, the limits are not adequate. Anyone who is still carrying low bodily injury and property damage limits is taking a chance. The costs of umbrella for \$1,000,000 would be well worth the money, if only to let one sleep better at night. The umbrella policy offers coverage above the normal basic policy and pays the limit of the umbrella policy in excess of the normal basic policy. For example, if one has an auto policy with limits of \$100,000 per person and \$300,000 per accident for bodily injury and \$100,000 for property damage, then a \$1,000,000 umbrella will pay up to \$1,300,000 per accident for bodily injury or \$1,100,000 for property damage.

In the same area, another important and costly insurance coverage is General Liability. This offers protection against losses which may be brought against a business because of its actions other than those relating to automobiles. Often, just like auto, it is written for very low limits, which expose the business firm to tremendous losses. Also, as in the case of the auto mentioned above, an umbrella can be put over the

(continued on page 25)

Today, more than ever, Ditch Witch makes \$ense.

The New Ditch Witch Modularmatic Loader

Ditch Witch has added a thrifty new "job-expander" module to the line of Modularmatic equipment.

Just add the hydraulic loader module and you're ready to clean up the job site and load a variety of materials. Outfit a R40 or R65 Modularmatic vehicle with your choice of trenching modules on the rear and the loader on the front. Or attach the Ditch Witch Model 140 utility backhoe module on the rear and the loader on the front for a Ditch Witch backhoe-loader combination.

Controls for the half-yard bucket are located for operator convenience and effectiveness.

Ditch Witch's Modularmatic concept gives you more for your equipment dollar because it enables one machine to do more jobs. In addition to the loader, Modularmatic modules are available for trenching, restoration, vibratory plowing, backhoe work and related underground construction jobs.

The new Ditch Witch Modularmatic loader. Just another reason why . . .

**TODAY, MORE THAN EVER,
OUR MODULARMATICS MAKE \$ENSE!**

Ditch Witch . . . equipment from 7 - to 195-HP.



CHARLES MACHINE WORKS, INC.
P.O. Box 66
Perry, Oklahoma 73077

For More Details Circle (107) on Reply Card

How Lexington, Mass., solved its caterpillar problem with no adverse side effects.

Lexington is densely populated. So Paul Mazerall, park superintendent and tree warden, had a big job on his hands.

To stop the infestation of tent caterpillars, he had to spray around schools, parks, churches and other public places. His choice of insecticide became critical.

Paul found a product that met all his requirements. A product that wouldn't endanger local wildlife or pets or people. And one which city work crews could handle easily. It was DIPEL®.

One shot did the job.

That's all it took to get rid of the tent caterpillar problem in Lexington.

Selective control made DIPEL the answer to Lexington's problem. It worked so well, in fact, that Paul plans to expand its use.

Kills gypsy moth and others.

Including cankerworm (inchworm). Spanworm. Bagworm. Fall webworm. California oakworm (California only).

But performance is just one of the reasons cities like Lexington are switching to DIPEL.

DIPEL can be mixed and applied without protective clothing. And it mixes easily with foliar nutrients. So you can do more than one job during each pass. As a matter of fact, some cities are even spraying DIPEL from aircraft.

Yes, tree wardens like Paul Mazerall have the right idea about caterpillar control. When you have a problem, spray DIPEL.

DIPEL®



AGRICULTURAL AND VETERINARY
PRODUCTS DIVISION

ABBOTT LABORATORIES, NORTH CHICAGO, ILL. 60064

GENTLEMEN: We are interested in spraying DIPEL®

Please phone me promptly. Have your representative visit. Mail literature.

Name _____ Acres _____

Title _____ Pest(s) _____

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City, Zip _____ By ground rig

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MOTIVATING the **TURNED-OFF** EMPLOYEE

PART 1 The Needs of Man



Editor's Note: This is the first of a series of employee management articles designed to better employee-employer relations. The subject sequence has been separated into definition of needs, problems and goals and application techniques. The series will appear in concurrent monthly issues.

IN ANY ORGANIZATION — public or private — there are at least two sets of goals to be achieved: (1) those of the organization and (2) the personal goals of people in the organization. It is imperative that each individual — owners, managers and non-managerial personnel — achieve their personal goals within the organization environment.

The goals of the organization — more profits, more service or whatever — and the goals of the people in the organization are completely compatible, in spite of the efforts of some to establish conflict and hostility. Where conflict and hostility exist, they are the product of a lack of understanding — advertent or inadvertent — between the parties involved. Understanding will not be achieved until those involved understand the nature of man — the needs that motivate him and the work environment in which he strives to survive.

From my observation and experience, I have found that many people in the organization are demotivated inadvertently by managers. Seldom do administrators deliberately demotivate people and when you find managers who *do* undertake such an administrative practice, their objectives should be carefully considered and weighed. Too frequently management and unions take a miserable attitude toward people in general. Often this arises out of inadvertent misunderstanding of what it takes to motivate people in an organization.

Before we progress too far in this analysis, it would be best to define management so that the following discussion can be put in proper perspective. My definition is as follows: Management is a decision-making process of (1) determining and establishing objectives and (2) achieving those objectives by the best possible utilization of limited, allocated resources.

Managers are decision-makers. They make decisions to establish the



Dr. John L. McKeever

The author has vast consultation experience in areas of organizational structure, management training, planning and performance evaluation. Also author of several technical papers on finance, human relations and motivation, Dr. McKeever is presently professor of management, Colorado State University, Ft. Collins, Colorado.

objectives of the organization that will provide guidance and direction for other decisions and human behavior in the organization. Second, managers make decisions that will result in the achievement of the predetermined objectives by the best possible utilization of the resources allocated to them in any function and at any level in the organization.

The most important resource allocated to managers in every organization is people, for all non-human resources lie fallow until the human element is applied. Yet, in our society we tend to use the human resource like we use non-human resources — we just use it; we don't motivate it; we discard it; we get rid of it; it is perishable and when things go bad we can always lay it off or fire it. Each resource allocated to managers must be used in the best possible way if organization goals and the personal objectives are to be achieved. The use of each resource requires the application of a certain body of knowledge if it is to be used properly in achieving objectives. In order to use human resources in the best possible way to achieve organizational objectives, managers must understand the nature of human behavior in the organization environment and what must be done to create a work environment conducive to motivation. To do less will result in a failure to achieve objectives.

The first thing managers should understand is that the people who come to work in the organization bring with them a set of personal goals that must be achieved in conjunction with the objectives of the company. Just enjoying the company of people is not sufficient in good management. You've got to understand the nature of every individual who is working for you. He is motivated by certain things and demotivated by others. And frequently he is *not* motivated by things you think are important.

Many managers have made some very bad mistakes in determining and identifying the goals of people in the organization. They still place too much emphasis on wages, salaries and fringe benefits. Salaries, wages and fringe benefits *are* motivators of people, but only to a certain extent. In addition to economic goals, management must provide satisfaction of a non-economic nature if employees are to

(continued)

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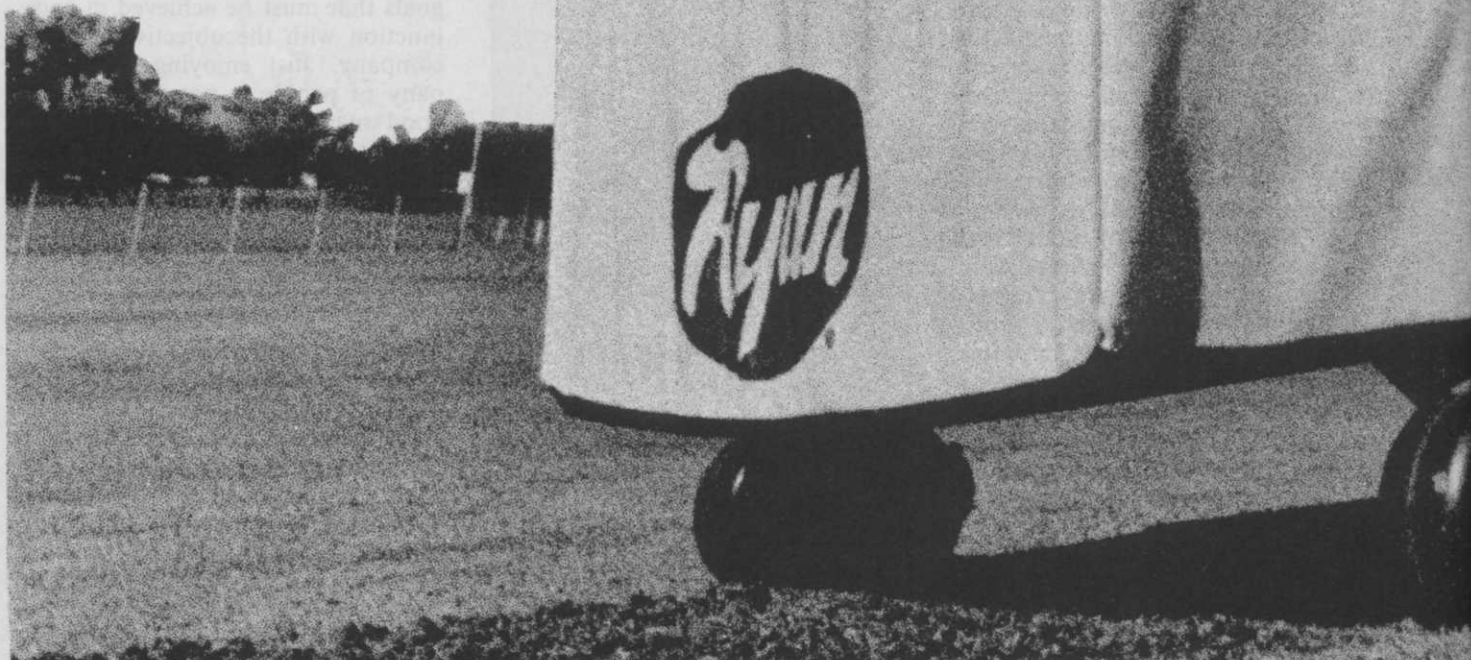
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be motivated to greater efforts and loyalty. In no way are the prior statements meant to downgrade the importance of salaries, wages and fringe benefits as employee motivators. They are important in the total effort but their importance is dependent upon and interrelated with other factors that employees feel are also important to their life in the work organization. Let us look more closely at the nature of man and the factors that motivate him. Although we will observe him in the work climate, the goals relate to his behavior in whatever environment we find him.

To the individual, his goals are important and any failure of management to consider his goals as important will generate a negative reaction. Therefore, a major responsibility of every manager in the organization is to (1) recognize the goals of subordinates and (2) to coordinate and integrate the goals of employees with the objectives of the organization.

Common Employee Goals

What are the goals of employees in the organization? They will differ for each employee depending upon his needs and personality. I have found that *all* employees have some common goals that they hope to achieve. The following are a few of these common goals.

To Do A Good Job — I have never found a person in an organization who did not want to do a good job. However, many people were not doing as good a job as they were capable of doing because they were not motivated to do better. In fact, many employees suffered feelings of guilt and inner conflict because they were not doing the job they were capable of doing. This is not only a terrible waste of resources, but it violates the very dignity of man.

To Aspire For Something Better Than He Has — Again, I have found that all employees in the organization aspired for something that they didn't have or that they wanted more of. For a variety of reasons, including personality, health, age, social relationships, sex, motivation and factors internal and external to the organization, employees aspired for similar and dissimilar things. Many aspired for promotions and sincerely felt that they could do a better supervisory job than their bosses. Many aspired for a larger

salary, wage or fringe benefits. Some aspired for better job assignments while others aspired for better working conditions. The aspirations of people involved short and long-run time periods, impossible dreams and achievable goals. People aspire — even in organizations.

To Achieve Recognition — Every now and then employees like a little assurance (1) that what they are doing has some relevance in the overall achievement of organization objectives, (2) that they are doing the job expected of them and doing it well and (3) that their efforts are appreciated by peers, superiors, and subordinates. One doesn't have to be told too frequently that he is doing well, but an occasional compliment or word of assurance certainly does things for one's ego. Again the type or form of recognition is dependent upon the individual's personality, ambition, needs or goals. All too often, employees tell me that the only time they hear how they are doing is when they do something wrong.

Social Balance and Order — Many employees can't fully explain it, but they have goals that pertain to the maintenance of social order and balance in their work environment. Nothing is more upsetting to employees than management decisions that cause social frustrations and anxieties. Decisions to reorganize without thoroughly explaining the effect it will have on employees can be a very frustrating experience. Crisis management "austerity programs" that create personal survival anxieties can be very demotivational. Changing the physical environment of offices, departments or placements of desks, can create anxiety problems for employees beyond the understanding of most managers.

This does not mean that employees are not receptive to change. Quite the contrary, employees look forward to change if they understand the reasons for the change or are asked to participate in the change. It is axiomatic that people tend to fear the things they don't understand.

These are but a few of the common goals of employees that should be considered by managers in motivating people to the effort they are capable of achieving. It is a manager's responsibility to assist subordinates in the achievement of

these goals and to remove or eliminate obstacles that may prevent the achievement of the goals. Too frequently, managers may create obstacles to the goal achievement of subordinates.

Employee Expectations

In addition to assisting subordinates to achieve personal objectives, the manager should actively and sincerely create an organizational climate conducive to employee motivation. Research I have conducted has revealed that employees anticipate and expect certain things from their bosses that are necessary to their well-being in the organizational environment. Of the many expectations that employees anticipate from management, four of the most important will be discussed.

One of the most important expectations of employees is fairness. As important as salaries or fringe benefits, fairness is anticipated by all employees upon accepting a position with an organization. Without fairness, what sort of an organizational environment would it be? Distrust and suspicion would run rampant.

Fairness covers a variety of areas to the employee. He expects fairness in job assignments. In every organizational sub-unit the job assignments include work activities that are sought after and those that are less preferable. In addition to less preferable assignments, the work loads of some employees may exceed that of others. Employees become fully aware of any unfair allocation of work assignments and where such practices prevail it creates human problems.

Employees anticipate that they will be considered fairly when promotions become available in a department. Thus, managers should update the performance files of subordinates constantly if an equitable choice for promotion is to be made from eligible employees. In addition, employees anticipate that salary increments and other rewards or benefits will be given on the basis of fairness and equity.

A second factor is that of honesty. Almost as important as fairness, honesty ranks high in employees' expectations. Not only do employees expect the truth in answers to questions or problems encountered in the performance of their work,

(continued on page 28)



Scotts' President F. Leon Herron, Jr., addresses guests and company associates at the dedication of the Dwight G. Scott Research Center near Marysville, Ohio. The oil painting of Scott, unveiled at the ceremony, will hang in the reception area of the Center.

Turf Products Training Offered by Toro Company

The Toro Company will open its first turf products service training center in the Minneapolis suburb of Eden Prairie, Minn., in January.

The new school, now under construction, will be open tuition-free to employees of turf products customers in all markets and to service, sales and parts personnel of Toro distributors. There will be special courses for turf management students and vocational and technical school instructors. A total of 16 courses will be offered from January through June, with the first scheduled for Jan. 6 to 10.

Major elements of Toro's new service program, part of a five-year plan, include the following:

- Expansion of Toro mobile service units, fully-equipped vans staffed by highly-trained specialists, into additional distributor territories during 1975.
- Expansion of field service education into every turf distributor's territory. Training clinics cover such areas as techniques of mowing, engine and electrical systems maintenance, and troubleshooting. The field service education personnel will also conduct seminars for turf associations and at colleges and universities.
- A new warranty policy, extending the coverage period to one year.

Scotts Dedicates New Research Center in Ohio

O. M. Scott & Sons recently dedicated a new research facility near Marysville, Ohio. F. Leon Herron, Jr., the company's president, made the dedication address and christened the building Dwight G. Scott Research Center.

The facility includes a colonial-style main building with modern laboratories, growth chambers, administrative offices, a library and seminar auditorium. A separate wing contains four greenhouses.

Over 100 professional and

specialist researchers, including plant pathologists, chemists, entomologists, agronomists, chemical engineers and geneticists, are housed in the new Center. The work is supplemented by regional screening and testing done at Scott's five research field stations strategically located across the U.S.

In addition to the research personnel, the administrative offices of the ProTurf Division are also located in the main building.

Landscapers, Retailers Plan Joint Meeting

Nursery businessmen involved in landscaping and retailing will gather at the Galt House, Louisville, Ky., Feb. 16-20 for the first Joint Management Clinic sponsored by the National Landscape Association (NLA) and Garden Centers of America (GCA).

According to NLA President Tom Gilmore and GCA President Dan Capper, the two specialized fields — landscaping and retail garden centers — overlap in many areas, and rather than duplicating efforts with two separate meetings, it would prove much more valuable to the industry to hold a combined meeting.

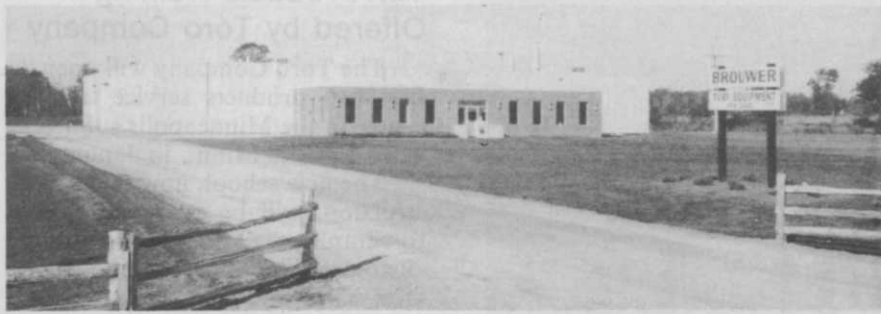
NLA will meet Feb. 16-17. NLA and GCA will hold the combined meeting Feb. 18 to noon on Feb. 19. GCA will meet from noon on Feb. 19 to Feb. 20.

Complete details and registration forms are available by writing NLA/GCA Joint Management Clinic, 230 Southern Building, Washington, D.C. 20005.



The Arborists Association of New Jersey recently named Harry P. Banker the 1974 "Arborist of the Year," the organization's highest honor. Banker (left), vice president of Trees, Inc., West Orange, N.J., is pictured with Emid Cardell, last year's award recipient, and Patricia Sheehan, New Jersey Commissioner of Consumer Affairs.

the commercial sod industry



In mid-1974, Brouwer Turf Equipment Limited, one of the largest producers of sod harvesters, opened this new plant near Keswick, Ontario. The facility provides 22,000 square feet of production space and 2,200 square feet of office space.

Northrup King Introduces Aquila/Parade Blend

Northrup King, Minneapolis-based seed company, has announced the introduction of two compatible Kentucky bluegrasses that together form a high-performance, low-maintenance blend.

Called Aquila/Parade, the blend is the product of ten years of research led by agronomist Howard Kaerwer. Northrup King, according to Kaerwer, "is firmly committed to seed blending, having long recognized the drawbacks of monoculture turf."

Aquila Kentucky bluegrass, by itself, holds its density and dark green color, and maintains a healthy, weed-resistant stand well beyond the turf establishment period, even under low to moderate nitrogen fertilization. It requires less moisture to maintain its color and shows tolerance to drought conditions. Its color and medium leaf width make it compatible with a broad range of turfgrasses.

Parade Kentucky bluegrass rapidly develops a tough sod. It withstands heavy traffic better than many bluegrasses and recovers quickly from injury, making it recommendable for high-traffic areas such as athletic fields and golf course fairways. It is similar in color and leaf width to Aquila.

The Aquila/Parade combination, according to Kaerwer, provides the turf professional with an attractive turf that establishes fast and lasts through into fall. It gives good disease protection and stands

up well under low management practices and heavy traffic.

Aquila/Parade as a single component can be blended with ryegrasses, fescues and other bluegrasses to give the turf professional a good combination of grasses to protect against disease and other stress factors.

Sod Producers to Meet At Tucson in February

American Sod Producer Association (ASPA) members will soon be heading for the Doubletree Inn, Tucson, Ariz., for their annual mid-winter conference, Feb. 27 to 28.

According to conference chairman and ASPA vice president Paul Florence, the Association's legal counsel Bill Harding will discuss compliance with the latest interpretations of regulations administered by regulatory governmental agencies.

The conference will also feature a "show-and-tell" in which individuals in the industry will share their techniques, innovations and experience in an informal discussion atmosphere.

For more information, contact Bob Garey, Association Building, 9th and Minnesota, Hastings, Neb. 68901.



Merrilyn Jacobs demonstrates the strong root system of healthy bluegrass sod during Maryland Turfgrass Association's (MTA) recent mini-tour for press representatives. Footmen for her "throne" are Dr. John R. Hall (left), extension turf management specialist, and Maurice H. (Gus) Day, seed and sod certification program supervisor for the State Department of Agriculture. Onlookers include (left to right): W. Lambert Cissel, Jr., owner-operator of Kimberthy Turf Farms, Inc.; Tom Stevenson, garden editor of the *Washington Post*; G. Laurence Moore, MTA president; and William T. Patton, chairman of the MTA publicity committee. Mrs. Jacobs is MTA executive secretary.

INSURANCE (from page 14)

basic contract. This umbrella contract is normally put over both auto and general liability.

Most arborists do have some equipment which should also be insured. Most insurance markets offer an all risk insurance contract for contractor's equipment. Although there are some exclusions on most any contract, this broad policy would cover a contractor's equipment against most losses. If this type of coverage on equipment seems expensive, the arborists may wish to look at high deductibles, which would decrease the premium and still cover the arborists against the catastrophic loss which may involve several pieces of equipment. This cost and deductible ratio will have to be closely examined and the arborist will have to decide how much of a loss he wishes to bear himself in order to save premium.

A mandatory insurance coverage if employees are involved, is workmen's compensation/employers liability. This is one of the most costly insurance coverages with which arborists are faced. Unfortunately, the experience of arborists has earned them the high rate which now prevails. The cost of back injuries, saw accidents and electrocution when working around power poles is still being paid for by the entire industry.

Reducing Costs

What is one to do about decreasing insurance costs and reducing his losses? The first step will be to make sure that the business is doing its best to eliminate such losses. No firm can hope to eradicate them, but their frequency and severity are definitely a function of safety awareness and this reflection will be passed along to the arborists in dollar savings and insurance pre-

mium. To eliminate losses, a safety program must be installed and carried out. If one doesn't know where to go to start such a program, he might check with his insurance agent or broker, who should be glad to help either through the insurance company or through the agent's own expertise.

Secondly, cost reduction is possible through your insurance costs, i.e., reduced premiums. There is a variation in price of insurance premium, just as no two arborists charge the same. Price will vary with service, experience and willingness of the insurance company to write the insurance agent's business. Needless to say, many insurance companies do not put arborists at the top of their list of priorities. Therefore, one should seek alternate insurance proposals. Remember to weigh the amount of service and expertise offered in the program along with the price. One might find in today's insurance market, the stability of his insurance carrier is as great a value as a 5-10% savings in insurance costs. Due to inflation, expensive money rates and adverse loss ratios, the insurance industry will be looking very closely at their portfolios. Many arborists will be requested by the insurance companies to find alternate insurance programs. This would be time-consuming and counterproductive for the arborist, unless the insurance agent is prepared and well-advised and can remarket the risk readily to another insurance company. Be sure that the company program selected is of good reputation and well-rated in the insurance industry. Ask for a rating from your agent, and ask for him to explain just what this rating means. He should be very happy to do so, and this will show him that you are looking for a quality program rather than a cut-rate insurance package.

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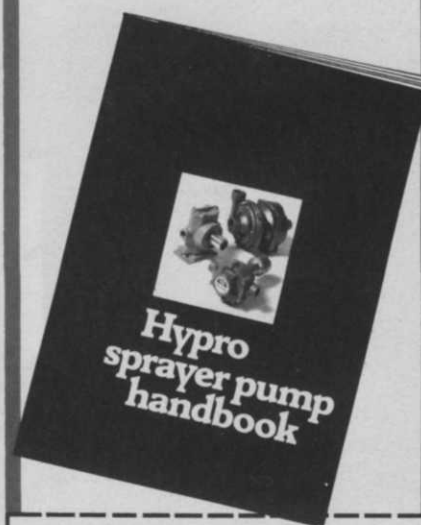
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meeting dates

Western Association of Nurserymen, trade show and 85th annual convention, Plaza Inn, Kansas City, Mo., Jan. 5-7.

Mid Atlantic Golf Course Superintendents Association, 46th annual educational conference, Baltimore Hilton, Baltimore, Md., Jan. 6-7.

Tennessee Turfgrass Association, annual conference, Sheraton South Motor Inn, Nashville, Tenn., Jan. 6-7.

Indiana Association of Nurserymen and Indiana Arborists Association, winter meetings, Stouffer's Indianapolis Inn, Indianapolis, Ind., Jan. 7-9.

Penn-Del Chapter, ISTC, annual symposium, Marriott Motor Inn, Philadelphia, Pa., Jan. 8-9.

Kansas State Shade Tree Conference, K-State Union, Kansas State University, Manhattan, Kans., Jan. 9-10.

14th Annual Michigan Turfgrass Conference, Kellogg Center, Michigan State University, Lansing, Mich., Jan. 14-15.

New York State Arborist Association, 1975 convention, Syracuse Hilton Inn, Syracuse, N.Y., Jan. 19-22.

27th Annual California Weed Conference, Sheraton Inn, Fresno, Calif., Jan. 20-22

1975 Arborist Seminar, Illinois Commercial Arborists and the Cook County Extension Service, Sheraton-O'Hare, Rosemont, Ill., Jan. 21.

New Jersey Recreation and Park Association, 9th annual symposium, Labor Education Center, New Brunswick Campus, Rutgers University, Jan. 21.

Southern Weed Science Society, 27th annual meeting, Sheraton-Biltmore Hotel, Atlanta, Ga., Jan. 22-24.

Rocky Mountain Regional Turfgrass Conference, Colorado State University, Fort Collins, Colo., Jan. 23-24.

Ohio Chapter, ISTC, 33rd annual meeting, Sheraton-Columbus Hotel, Columbus, Ohio, Jan. 26-28.

46th Annual Ohio State University Short Course, for arborists, turf managers, nurserymen, garden center operators and landscape contractors, Sheraton-Columbus Hotel, Columbus, Ohio, Jan. 26-30.

Associated Landscape Contractors of America, Inc., 13th annual meeting and trade exhibit, St. Petersburg, Fla., Jan. 27-31.

Turf Management Short Course, Nashville Center of the University of Tennessee, Nashville, Tenn., Jan. 27-31.

11th Annual Northern California Turfgrass and Environmental Landscape Exposition, San Mateo Co. Fairgrounds, San Mateo, Calif., Jan. 29-30.

Virginia Turfgrass Conference, Sheraton Motor Inn, Fredericksburg, Va., Jan. 29-30.

Weed Science Society of America, annual meeting, Statler-Hilton Hotel, Washington, D.C., Feb. 4-7.

Annual Turf and Landscape Conference, sponsored by the New York Turf and Landscape Association, the Long Island Gardeners Association and the Hudson Valley and Long Island Cooperative Extension Service, Tappan Zee Inn, Nyack, N.Y., Feb. 5.

CONEXPO '75, construction equipment exposition and road show, McCormick Place and International Amphitheatre, Chicago, Ill., Feb. 9-14.

Midwestern Chapter, ISTC, annual meeting, Plaza Inn, Kansas City, Mo., Feb. 11-13.

American Institute of Landscape Architects, convention, Marriott Inn, New Orleans, La., Feb. 13-15.

American Society of Consulting Arborists, 8th annual conference, Don CeSar Hotel, St. Petersburg, Fla., Feb. 13-15.

Joint Management Clinic, for nursery businessmen involved in landscaping and retailing, sponsored by the National Landscape Association and Garden Centers of America, Galt House, Louisville, Ky., Feb. 16-20.

National Arborist Association, annual winter meeting, Don CeSar Hotel, St. Petersburg, Fla., Feb. 16-20.

Golf Course Superintendents Association of America, international turfgrass conference and show, The Rivergate, New Orleans, La., Feb. 16-21.

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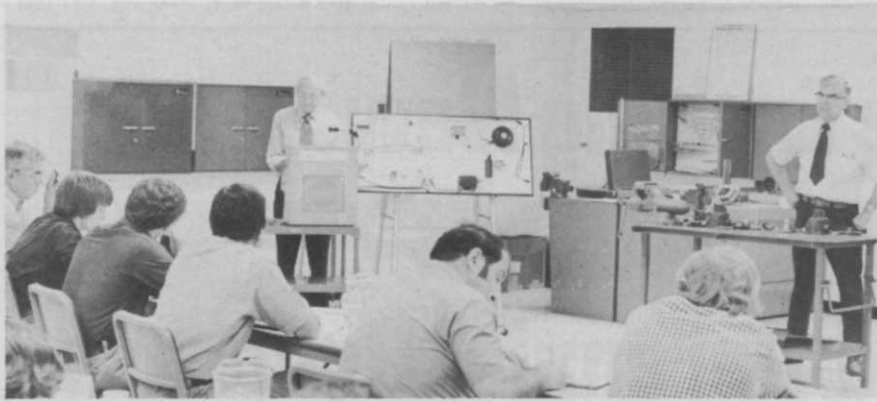
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Arnold Meyer (standing, left), service school training director, and Ed Peterson (standing, right), conduct a lecture demonstration on product electrical systems during a service school session.

FMC Holds School for Distributor Service Managers

FMC Corporation's Outdoor Power Equipment Division, manufacturer of Bolens lawn and garden products in Port Washington, Wis., has completed its 25th annual series of three-day schools for distributor service managers and field service men from across the United States and throughout Canada.

The classes are designed to keep the distributor service personnel up-to-date on technological changes, service techniques, new product designs and improvements. Special attention is also focused on increasing consumer knowledge of

seasonal maintenance and safety features. In addition, the service representatives hear presentations from major suppliers and utilize simulated working conditions for troubleshooting and repair work. After the session, they are then qualified to instruct at similar schools for their dealers in their respective territories.

Arnold A. Meyer, service school training director, said, "These service schools play a vital role in qualifying our service people throughout the country in providing efficient service and promoting customer satisfaction."

Goodman Elected Fellow

Dr. Robert N. Goodman, chairman of the University of Missouri-Columbia (UMC) Department of Plant Pathology, has been elected a Fellow in the American Phytopathological Society.

Goodman was one of eight scientists selected for the honor from the 3,000-member society. Announcement of his selection was made at the society's recent annual meeting in Vancouver, British Columbia.

Recognized by the society as a distinguished scientist, writer and administrator, Goodman has just returned to UMC after presenting two invitational research papers in Japan.

In one of these, he reported his finding of the bacterial toxin that causes fireblight. In the other, he reported the discovery of a new disease defense system in plants. Both research findings are having a major impact on scientists' efforts to cope with plant disease problems now causing billions of dollars in food production losses around the world.

Goodman holds B.S. and M.S. degrees from the University of New Hampshire and a PhD from the University of Missouri.

MOTIVATING (from page 22)

but they expect to be completely informed — to provide only half-truths or partial facts will not suffice. Although the research placed honesty high in the expectations of employees, the writer found it difficult to comprehend situations in which managers might revert to the use of lies, half-truths or the withholding of information. However, a deeper evaluation of this factor revealed many situations in which the employee could substantiate such practices. In some cases, the follow-up revealed that managers often did not maliciously withhold information or relate half-truths but it was done for other reasons, many of which were later found to be poorly conceived. No matter the reason, once suspicion or a lack of confidence has been instilled in the mind of the employee it is a difficult attitude to overcome.

Third, employees expect the manager to provide opportunity in the organizational environment. Opportunity takes many specific

forms but generally it reflects the expectations of employees to improve their lot in life in the organization. It provides something for each person to "shoot for" in the organization. It avoids the maintenance of status quo in the progression of each individual in achieving personal objectives in the organization.

Opportunity provides for each employee being considered for advancement — technically or managerially. Opportunity may involve an increase in salary, a fringe benefit, or training for a better job in the organization. In the goal structure of the employee, opportunity might provide greater security on the job.

When opportunity does not exist in an organization, the employee has little to aspire for and little to motivate him to achieve higher goals. Opportunity helps provide the means for the individual to achieve goals or to set higher ones.

Fourth, employees anticipate that their efforts and performance will be recognized by management.

Recognition may be a simple pat on the back and a reassuring word that his contribution is appreciated.

Some managers stress the point that they reward employees on the basis of individual merit and contribution to the achievement of organizational objectives. Generally, most qualified employees prefer to have their performance evaluated separately and measured against that of other in competition for available rewards.

Although the aforesaid employee goals and managerial expectations do not exhaust the motivational methods available to managers, they do provide some guidance in managerial action. Demotivated employees are not productive and loyal employees. And demotivated employees create problems in manpower planning no matter how scientific or rational the planning process. The greatest waste of resources in our society is that of the undeveloped potential of demotivated people in the organization.

SHADE TREES (from page 10)

I started collecting materials and ordering hydraulic cylinders, valves, pumps and hoses in January, 1965. By the end of February we started welding. After many trials and frustrations, on June 26, 1965, we finally dug our first tree — a four-inch caliper live oak — with the new hydraulic tree spade. Thus the "Texas Tree Shovel" was born. Although the operation was a success, so to speak, this first patient died. Further improvement of techniques gave good tree survival and the next year was spent moving trees in Brazoria County, Tex., on a part time basis.

At the 1965 Texas Association of Nurserymen Convention in Houston, I met Ralph Kemna of Minneapolis, Minn. Kemna had traveled the country extensively selling specialized equipment to nurserymen and was well aware of the need for mechanization in the industry. He encouraged me to show the machine at the International Shade Tree Conference the following year at Cleveland, Ohio. During that convention, I first became acquainted with Carl Boat, vice president of sales for Vermeer Manufacturing Company of Pella, Iowa. In the winter of 1967, a more polished version of the machine was taken to the Landscape Contractors Convention at Dallas.

After the convention, several people from Vermeer Manufacturing Company, including Boat, Carl Van Roekel, and Garry Vermeer, came to Fort Worth to watch us move large pecan trees in an experiment with Dr. Benton Storey, the pecan expert from Texas A&M University. This method of transplanting normally difficult-to-move pecans was a decided success. We transplanted 35 five-to-six-inch diameter pecans and two years later still had 100 percent livability, with many of the trees bearing nuts the same year they were transplanted.

Garry Vermeer was impressed and immediately offered to manufacturer and market the tree digger under our patent when finally issued. A contract with Vermeer Manufacturing Company was signed in 1967 to build and sell a version of our hydraulic tree digger. Patent Number 3,364,601 was issued to Albert H. Korenek on Jan. 23, 1968, and it is under this patent that Vermeer builds their "Tree Spade."

My tree production and sales company was known as Instant Shade Trees until August, 1967, when it incorporated as Instant Shade Trees, Inc., a Texas corporation, and is still operating as such. We presently have 25,000 oak trees from two to ten-inch caliper located on three tree farms totaling 75 acres near Alvin, Waco, and Houston, Tex. In our present operation we have ten hydraulic tree digging machines varying from a 14-inch diameter ball, 12 inches deep, up to a six-foot diameter ball, four and one-half feet deep and weighing 12,000 pounds.

The largest tree we have successfully moved is a 16-inch caliper live oak, 40 feet tall which was done with a 13-foot square concrete box requiring a 50-ton crane to handle. The greatest number of trees dug for a single job was 2,035, two- to four-inch caliper, which were dug over a five-week period for a nursery chain and delivered to stores all over central and western Texas.

We are now mechanically boxing trees where in our nursery and have boxed 89 three-inch caliper in a single day. We have balled and burlapped 105 trees in a day with our crawler-mounted, 36-inch balling machine and have transplanted up to 14 of the six-foot diameter, six-ton ball trees in one day. Our largest big tree job to date is the Plaza del Oro development in Houston for Shell Oil Company where we planted 745 live oaks up to five-inch caliper and still have 600 more to plant in the next two years.

This past spring we transplanted 442 large native trees such as pine, magnolia, sweet gum, oaks, yaupon holly and viburnums on a project at Lake Conroe north of Houston. The developers were dissatisfied with poor livability of native trees transplanted earlier by others with smaller equipment. With our flat bottom ball and the extra depth of soil in proportion to the ball diameter, the trees have performed well. In our part of the country, we recommend 12 inches of ball diameter to one inch of caliper for moving native woods trees. With this formula we find that less than one percent of the trees moved are lost, provided they are properly maintained after transplant. Nursery grown materials are more adapted to transplanting and we have moved hundreds of 11- to 12-inch caliper oak, pecan and pine

trees with our equipment that are doing extremely well. Care after transplanting is extremely important on trees this large.

Our out-of-state business is expanding and we have dug trees with our equipment in Ohio, Michigan, Illinois, Tennessee, Mississippi and Georgia, in addition to jobs all over Texas. At present we have two diesel rigs capable of cross-country travel and are ready to go anywhere in the continental United States where trees need transplanting with this highly-specialized equipment. Although Vermeer Manufacturing Company has done an excellent job in supplying mechanized digging tools for an industry which needed more mechanization, I feel equipment for the large tree moving business is still in its infancy. With public concern of ecology and the present environmental movements, each day we are confronted with requests to move larger trees that are beyond the capabilities of even our super large equipment. I personally believe that with further developments we will be able to move 12- to 24-inch caliper trees on location almost as easily as we can move eight- to ten-inch caliper trees today.

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*Available only through breeder and owner outlets.

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people on the move

Tom Williams, appointed turf district manager for Rain Bird Sprinkler Mfg. Corp., a position created due to Rain Bird's sales force expansion to keep pace with its increasing turf market sales. In further company action, **Morgan Howard**, **Bruce Watson** and **Jim Hoover**, named district managers to handle turf irrigation sales.

* * *

James P. Tubbs, promoted to vice president, operations, of Ted Collins Tree and Landscape, Victor, N.Y.

* * *

I. Donald Rosuck, appointed vice president, finance, of Melnor's Turf Irrigation. **Malcolm Wayne**, appointed midwestern regional sales manager for Melnor lawn and garden products and underground turf sprinklers.

* * *

Kevin Sullivan, promoted to marketing manager of Stanley Hydraulic Tools, Inc.

* * *

Ali A. Akhavein, appointed product development supervisor for the agricultural chemical division of ICI United States Inc. He will be responsible for development of pesticide candidates for use in U.S. agriculture. Further moves within the division include: **John J. Lauber**, appointed registration supervisor and will coordinate assimilation of necessary data for EPA registration of agricultural chemical products; **George E. Glatz**, joined as technical sales representative.

* * *

Eugene J. Gibbons, joined Disston, Inc. as manager of international sales operations.

* * *

John I. Madigan, joined the agricultural division of Ciba-Geigy Corp. as railroad specialist in the industrial herbicide sales group and is responsible for developing marketing and sales programs for herbicides on railroads and petrochemical sites in the southwestern U.S.

* * *

John J. MacFarlane, Jr., named technical director for Gustafson, Inc., a distributor of seed treatment chemicals, equipment and technology.

* * *

Fred J. Meyer, promoted to executive vice president, finance and corporate operations, Sandoz, Inc. **Eugene A. De Felice**, promoted to vice president, corporate scientific development of Sandoz.

* * *

John Skinner, Jr., joined sales staff of Leary Supply Co., Colts Neck, N.J., wholesale distributors of greenhouse and nursery equipment and supplies.

* * *

Donald N. Arndt and **Howard A. Bacon**, elected corporate vice presidents of Walbro Corp. **Robert H. Walpole**, named vice president, international operations, and **L. E. Maxwell**, appointed marketing services manager.

* * *

Harbans Singh Bhella, joined the Botanic Garden of the Chicago Horticultural Society as research horticulturist. He will conduct a program to evaluate ornamental plants for landscaping use in the Chicago area.

MEET THE ASSOCIATIONS—

Backbone of the Green Industry

In recent months, we have realized more and more the need for unified voices in shaping the future of the Green Industry. Over-all professional standards and self-administration are realities that must be achieved before our industry groups can control their future business and accept fewer decisions made by outsiders. Accomplishments of these goals can best be achieved through active organizations and associations.

In September, WEEDS TREES and TURF polled leading organizations in the Green Industry. In addition to identifying information, we asked for objectives achieved in 1974 and proposed goals for 1975. Their replies are given below.

THE AMERICAN HORTICULTURAL SOCIETY

Mount Vernon, Virginia 22121
Tel. (703) 768-5700

O. Keister Evans, executive director

Officers: Dr. Henry M. Cathey, president; Dr. Gilbert S. Daniels, 1st vice president and treasurer; Mrs. Erastus Corning, II, 2nd vice president; Rachel Snyder, secretary.

Total membership: 30,000

Objectives met in 1974: The total membership reached 30,000 members recently. The Society's publication, *American Horticulturist* magazine, was changed this year from a quarterly to a bi-monthly issue. The Society also has a newsletter, *News & Views*, which is available to the membership on the months opposite the magazine.

Objectives proposed for 1975: Our objectives for the year 1975, and on a continuing basis, are a continuation of the rapid membership growth, improved publications, as well as additional publications, and a major fund raising campaign for the further development of the Society's services to its members, as well as for use in the development of the National Center for American Horticulture.

AMERICAN SOCIETY OF CONSULTING ARBORISTS

12 Lakeview Avenue
Milltown, New Jersey 08850
Tel. (201) 821-8948

Spencer H. Davis, Jr., executive director

Officers: W. Roland Shannon, president; O. J. Andersen, president-elect; F. Earle Martin, vice president; William P. Lanphear, secretary-treasurer; Walter P. Morrow, past president. **Directors:** Charles H. Michler; Arnold H. Webster; Walter J. Barrows; Wilfrid Wheeler, Jr.

Total membership: 125

Objectives met in 1974: (1) Excellent contacts with Insurance Services Office and now anticipated increase in insurance payments to homeowners and businesses for losses of shade trees. (2) Excellent contacts with congressional representatives and leads to Internal Revenue Services for ultimate changes in policy on allowances for casualty losses involving shade trees. (3) Increased public relations and funding for increased use of advertising in various law, horticultural and trade magazines resulted in increased number of requests for Directories of ASCA members and leaflet describing type of services they perform.

Objectives proposed for 1975: (1) Bring closer to fruition our attempts to raise insurance company payments on tree losses and IRS allowances on casualty losses through more realistic shade tree evaluation procedures in cooperation with International Shade Tree Conference and American Association of Nurserymen. (2) In cooperation with legal and insurance advisors, consider the problem of "malpractice and poor judgment suits" against any type of horticultural consultant. (3) Obtain qualified members in those parts of the United States and Canada which are not presently served by ASCA members.

AMERICAN SOD PRODUCERS ASSOCIATION

Association Building
9th and Minnesota
Hastings, Nebraska 68901
Tel. (402) 463-5691

Bob Garey, executive director

Officers: Charles Davis, president; Paul Florence, vice president; Charles L. Lain, secretary; Wallace A. Huggett, treasurer; Jack Kidwell, past president. **Board of Trustees:** Gerry Brouwer, Parker Shirling, Norm LeGrande, Thomas A. Thornton.

Total membership: 268

Objectives met in 1974: Two outstanding national meetings were held with national and international representation. The annual midwinter conference in New Orleans in February featured practical, profit-making or cost-reducing experiences of producers from various parts of the country. The annual convention and field days in Maryland in July, attended by over 400, was the largest convention in the history of ASPA. Outstanding equipment displays, field demonstrations and social activities contributed to the success. Continued circulation of specifications in the utilization and installation of sod for the use of architects, contractors, governmental agencies, and others. Through this manual, available from ASPA members, the users as well as the sod industry have been able to do an outstanding job

in meeting the requirements of the consumer. Continued to make available the Uniform Accounting System for ASPA members and particularly for the use of new members entering the field, to secure standardization and effective fiscal controls and help analyzing costs. Improved communication with the members through special bulletins and printed publications to apprise the membership of ideas and activities of beneficial information.

Objectives proposed for 1975: Conducting an extensive survey (with the cooperation and assistance of the various states) covering the entire sod industry to determine the "profile of the industry"; to utilize the totals obtained in working with other groups to enable them to realize the advantages and success of using sod; to be able to exert greater influence in developing workable legislation and regulation involving the industry; and to develop the influence and effectiveness of ASPA through expanded programs of direct and practical assistance to its members. To develop continuing procedures for surveying so as to determine trends and industry-wide information. To develop and expand public information activities by providing special brochures regarding sod, its advantages and utilization to be made available to ASPA members for distribution to their customers. Continue monitoring legislation and regulations at both the state and national level which may affect sod producers and to attempt to minimize government control and regulation consistent with good citizenship. Continue to provide members with practical direction and information to assist them in complying with various laws and regulations. Develop publicity regarding the advantages of using sod in appropriate places. Study and, if advantageous to the members, implement a program of group insurance for members to include all types of coverage needed by sod producers. Expand and increase membership in all categories for effective programming. Utilize Key Men designated in each state as a focal point for: securing new members; reporting on sod producer activities within his state; monitoring legislation and regulatory activities within his state; and serving as a coordinator between state and regional sod producer groups.

ARBORICULTURAL RESEARCH AND EDUCATION ACADEMY*

*Affiliated with the International Shade Tree Conference.

Officers: Dr. Frank S. Santamour, Jr., president; Dr. Erik Jorgensen, president-elect; Dr. Hugh E. Thompson, vice president; Clark O. Eads, secretary-treasurer.

Total membership: 90

Objectives met in 1974: Organized and were accepted by the International Shade Tree Conference. First formal meeting was held.

Objectives proposed for 1975: Prepare a list of resource persons for various shade tree problems. Prepare a listing of state publications on shade trees. Run a workshop at the International Shade Tree Conference annual meeting.

ASSOCIATED LANDSCAPE CONTRACTORS OF AMERICA, INC.

1750 Old Meadow Road

McLean, Virginia 22101

Tel. (703) 893-5440

Thomas Hal Stewart, executive director

Officers: Ralph D. Stout, Jr., president; Lew Hammer, president-elect; Ronald A. Ahlman, vice president; Duane Nelson, vice president; Dick Brickman, secretary; William C. Byers III, treasurer.

Total membership: 400

Objectives met in 1974, proposed for 1975: The Associated Landscape Contractors of America, Inc. serves as a clearinghouse for information, and a means of working together for the mutual benefit of landscape contractors. Concern with environmental quality is exemplified in the Annual Environmental Improvements Awards Program. Concern for the continuing education of ALCA members is manifest in the annual meetings and trade shows, regional seminars and educational literature in the form of technical bulletins, information manuals and the *Action Letter* newsletter. ALCA focuses on the collective problems of its members and serves as the national spokesman for the landscape contracting industry.

GOLF COURSE BUILDERS OF AMERICA

806 15th Street N.W.

Washington, D.C. 20005

Tel. (202) 628-1833

Harry J. Lambeth, executive director

Officers: Frank A. Underwood, president; Lyle Thompson, president-elect; J. R. Costin, vice president; E. M. Witter, secretary; Gene M. Brown, treasurer.

Total membership: 43

Objectives met in 1974: We achieved a closer working relationship with Golf Course Architects; provided membership directories and correspondence with the Park & Recreation directors of the 200 largest cities; increased our advertising campaign and provided directories to Golf Course Architects and others.

Objectives proposed for 1975: To work closer with real estate developers regarding golf courses.

GOLF COURSE SUPERINTENDENTS ASSOCIATION OF AMERICA

1617 St. Andrews Drive

Lawrence, Kansas 66044

Tel. (913) 841-2240

Conrad L. Scheetz, executive director

Officers: Charles G. Baskin, CGCS, president; Palmer Maples, Jr., CGCS, vice president; George W. Cleaver, CGCS, secretary-treasurer; Clifford A. Wagoner, CGCS, past president. **Directors:** Melvin B. Lucas, Jr.; Richard W. Malpass, CGCS; Charles H. Tadge, CGCS; Gordon C. Witteveen, CGCS; Theodore W. Woehrl, CGCS.

Total membership: 3,806

Objectives met in 1974: In brief, the goals were to improve educational opportunities, increase visibility for the Association and the superintendent, and to assist in improving the superintendent's abilities to deal with critical shortages through improved management. Efforts in the area of education included: (1) Renewed emphasis of the GCSAA seminar program. Two new seminars were prepared — pesticide chemical usage and

employee management techniques — and the seminar on financial decision making was revitalized and offered again. (2) In conjunction with the pesticide seminar, a comprehensive reference manual was prepared for members' use. (3) GCSAA's Educational Advisory Council, consisting of nine university turfgrass experts, was formed.

To improve the visibility of the Association and the profession of golf course superintendency, a multimedia program was designed and implemented, including the following facets: (1) GCSAA 'Citation of Performance' awards presented to five superintendents hosting major golf tournaments. (2) A new booklet, *You and GCSAA, A Meaningful Combination*, describes the purposes of the Association and advantages of membership; (3) *The Golf Superintendent, His Qualifications, His Responsibilities, His Requirements*, another new publication, tells the story behind the professional golf course superintendent. (4) The Association took an active role in the area of governmental relations, particularly with EPA and OSHA officials. (5) The Association continued to participate in allied association meetings.

Shortages of materials vital to golf course operation caused many problems for golf course superintendents, but most golfers did not notice any significant changes because of the following actions: (1) The Association's magazine, *The Golf Superintendent*, contained articles on shortages, suggested ways the superintendent might overcome potential problems, and forewarned of possible shortages. (2) A guide to OSHA requirements was prepared and distributed to all members.

Objectives proposed for 1975: (1) Working toward establishment of a pension plan for the membership. (2) Assist the superintendent in dealing with inflation problems. While information will be published in *The Golf Superintendent*, there will also be publications, talks, and so on, which will be helpful to members. (3) The Association plans to prepare its members to deal with governmental regulations and at the same time continue to insure that the superintendent's interests are fairly represented and protected. (4) Attention will be focused on the superintendent as an individual with responsibility to his course and community. Guides and instructions to help the superintendent become a more professional man will be given through talks, articles and personal contact in seminars and local chapter meetings. The certification program will continue to improve and gain in its value to the Certified Golf Course Superintendent.

Generally speaking, the Association will continue to strive toward its goal of upgrading and improving the image of the golf course superintendent and to disseminate information which will make possible a more efficient and economical management of golf courses throughout the world.

INTERNATIONAL SHADE TREE CONFERENCE

3 Lincoln Square
P.O. Box 71

Urbana, Illinois
Tel. (217) 328-2032

E. C. (Cal) Bundy, executive secretary

Officers: John Z. Duling, president; Jack R. Rogers, president-elect; Hyland R. Johns, vice president; E. B. Himelick, executive director; Dan Neely, editor.

Total membership: 2,394

Objectives met in 1974: Realized the establishment of three new state affiliated chapters: New Jersey Chapter, Kentucky Shade Tree Association and Indiana Arborists Association. Completed the work of microfilming the back issues and indexes of our monthly magazine, *Arborist's News*. The microfilm sets are now available for purchase by members, libraries and individuals. Received a substantial amount of Memorial Research Contributions from members and chapters in response to a special 50th Anniversary appeal by Immediate Past President F. Lewis Dinsmore. Enjoyed an informative 50th Anniversary Convention in the Marriott Motel, Atlanta, Ga., in August. Attending were 866

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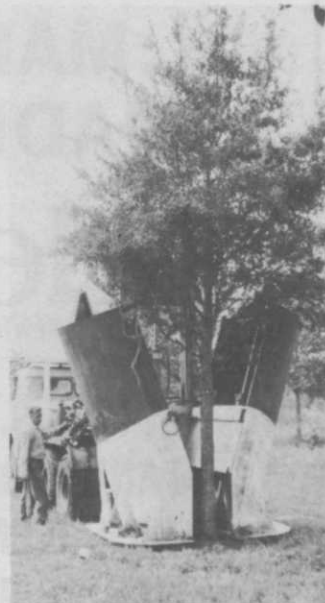
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members, guests and their families. Over 30 scientists and practitioners from many disciplines and experiences presented educational papers to keep arborists informed of technical and professional developments.

Objectives proposed for 1975: Will proceed to broaden membership services by changing the name of our monthly magazine, *Arborist's News*, to *Journal of Arboriculture* and develop the publication into a full-fledged journal, including referred papers along with other articles and current developments in arboriculture. Will plan to increase our sponsorship of arboriculture research projects by establishing a Memorial Research Trust Fund having tax-exempt status for donors and recipients. Will cooperate with other associations in revising our publication, *Shade Tree Evaluation*. Will continue to develop guidelines to assist the government in implementing federal pesticide legislation.

NATIONAL AGRICULTURAL AVIATION ASSOCIATION

Suite 808
1101 17th Street N.W.
Washington, D.C. 20036
Tel. (202) 223-2822

F. Farrell Higbee, executive director

Officers: Al F. Johnson, president; James L. Maxwell, vice president; Robert Copeland, secretary; Robert Aukes, treasurer.

Total membership: 908

Objectives met in 1974: During 1974, we were very fortunate as an Association to obtain 100 percent of the fuel requirements for agricultural aviation. **Objectives proposed for 1975:** In 1975, we hope to expand our new monthly publication, *The World of Agricultural Aviation*.

NATIONAL ARBORIST ASSOCIATION, INC.

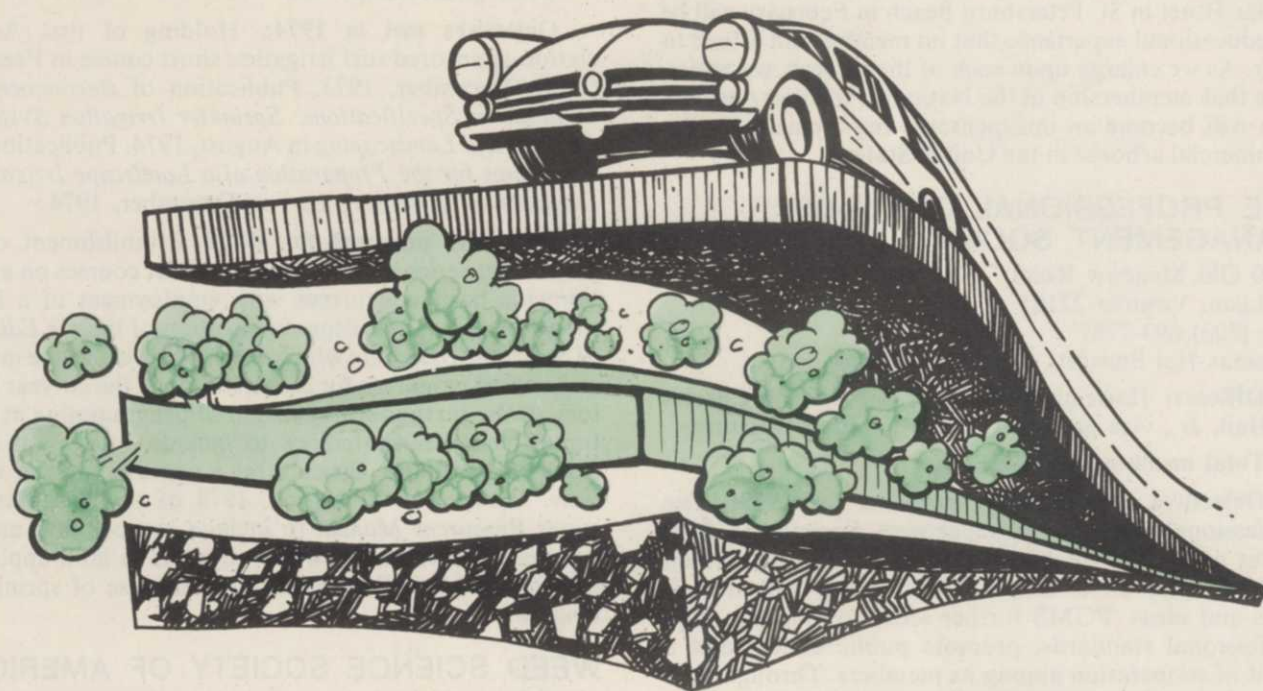
3537 Stratford Road
Wantagh, New York 11793
Tel. (516) 221-3082

Robert Felix, executive secretary

Officers: W. Roland Shannon, president; Thomas A. Morrison, 1st vice president; Boyd Haney, 2nd vice president; Gerald E. Farrens, secretary; Kenneth Kirk, treasurer; John A. Shullenbarger, past president. **Directors:** Larry Holkenborg, Walter E. Money, Bruce M. Walgren.

Total membership: 240

Objectives met in 1974: In 1974, we appointed a new executive secretary who has revitalized the National Arborist Association by bringing it to the members via attendance at regional meetings and visits to member offices all over the country. Our monthly newsletter, *Arborist Action*, has been expanded to an eight-page issue which keeps our members abreast of new developments both legislative and regulatory that affect the tree care industry as well as other pertinent material. We have supplied our members with Monographs to help them improve management techniques. Our N.A.A., OSHA manual has been updated and we have represented ourselves when necessary in Washington. We have given financial and technical support to the impending certification of pesticide applicator requirements.



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THOMPSON-HAYWARD CHEMICAL COMPANY
P. O. Box 2383
Kansas City, Kansas 66110

Objectives proposed for 1975: For 1975, we expect to enlarge upon what we did in 1974 as well as develop new member services. Our 1975 annual meeting at the Don CeSar Hotel in St. Petersburg Beach in February will be an educational experience that no member can afford to miss. As we enlarge upon each of these areas, we anticipate that membership in the National Arborist Association will become an indispensable requirement for the commercial arborist in the United States.

THE PROFESSIONAL GROUNDS MANAGEMENT SOCIETY

1750 Old Meadow Road
McLean, Virginia 22101
Tel. (703) 893-7787

Thomas Hal Stewart, executive director

Officers: Harleigh R. Kemmerer, president; Charles L. Hall, Jr., vice president; Allan Shulder, treasurer.

Total membership: 600

Objectives met in 1974, proposed for 1975: The professional Grounds Management Society (PGMS) serves as a legally constituted medium through which members may direct and coordinate their collective efforts and ideas. PGMS further seeks to maintain high professional standards, promote public esteem and a spirit of cooperation among its members. Through such activities as the Annual Conference, *Manager's Memo* newsletter, regional seminars, and surveys and research, PGMS seeks to promote the continuing education of grounds managers. PGMS also serves as national spokesman for the grounds managers and seeks to keep members informed on legislative proposals, administrative agency activities and other matters affecting the profession.

SPRINKLER IRRIGATION ASSOCIATION

13975 Connecticut Avenue, Suite 310
Silver Spring, Maryland 20906
Tel. (301) 871-8188

Walter D. Anderson, executive secretary

Officers: James D. Pichon, president; W. J. (Jack) Ogle, vice president and president-elect; Taylor Ramsey, treasurer. **Directors:** Paul Bohley, Joseph Fiala, Joseph

Harris, W. J. Liddell, Edward Newbegin, R. A. Wahl, Ray York and Gary Underhill.

Total membership: 400

Objectives met in 1974: Holding of first Association-sponsored turf irrigation short course in Fresno, Calif., December, 1973. Publication of *Recommended Installation Specifications: Sprinkler Irrigation Systems for Turf and Landscaping* in August, 1974. Publication of *Guidelines for the Preparation of a Landscape Irrigation Contractors' Licensing Law* in December, 1974.

Objectives proposed for 1975: Establishment of a permanent series of turf irrigation short courses on a nationwide basis concurrent with employment of a full-time educational director. Publication of the *4th Edition of Sprinkler Irrigation* which will include extensive material on turf irrigation for the first time in the 20-year history of the textbook. Expansion of programming at national technical conference to include concurrent sessions on turf and agricultural irrigation for the first time. Publication in March, 1974 of the *SIA Wastewater Resources Manual* to include sections and material pertinent to use of waste effluents in land application on turf installations through the use of sprinkler irrigation.

WEED SCIENCE SOCIETY OF AMERICA

425 Illinois Building
113 North Neil Street
Champaign, Illinois 61820
Tel. (217) 356-3182

Officers: E. L. Knake, president; C. R. Swanson, president-elect; E. G. Rodgers, past president; A. P. Appleby, vice president; R. D. Ilnicki, secretary; F. W. Slife, treasurer; T. J. Sheets, WSSA editor. **Directors** (in addition to officers): D. E. Bayer, C. J. Cruse (executive secretary); S. N. Fertig; L. S. Jordan; M. K. McCarty; M. G. Merkle; J. D. Nalewaja; W. J. Saidak; R. D. Sweet; William Welker; J. L. Williams.

Total membership: 1,900

Objectives met in 1974, proposed for 1975: The Weed Science Society of America (WSSA) is organized to promote the development of knowledge concerning weeds and their control; to foster unity in research, legislation, regulation and terminology; to encourage high standards in weed science education; to stimulate quality research; and to facilitate publication of weed science information. Weed Science includes the study of weeds and their control by cultural, mechanical, biological and chemical means. WSSA members are engaged in varied activities including research, teaching, extension, legal regulation, product development and marketing. They are involved in controlling weeds in field crops; horticultural crops; pastures and rangelands; forests; aquatic areas; and non-crop areas such as lawns, recreational areas, roadsides, railroad and utility rights-of-way, and industrial sites. WSSA has encouraged and worked closely with the Latin American Weed Science Society, the Asian-Pacific Weed Science Society, and other weed control organizations of the world. It also works closely with other professional organizations having related interests, and is a member of CAST (Council for Agricultural Science and Technology). WSSA publications include *Weed Science*, the official journal of WSSA, bimonthly; *Weeds Today*, a quarterly publication; and the *WSSA Newsletter*, published at least four times a year.



1974 Article and Author Index

Issue Page

KEY: Feature article (fa); news story, (ns); conference report, (cr); book report, (br); obituary, (o); editorial, (ed); and column, (c); government news, (gn).

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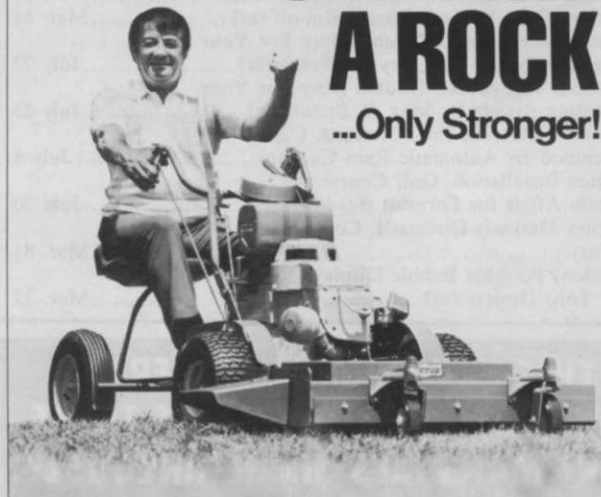
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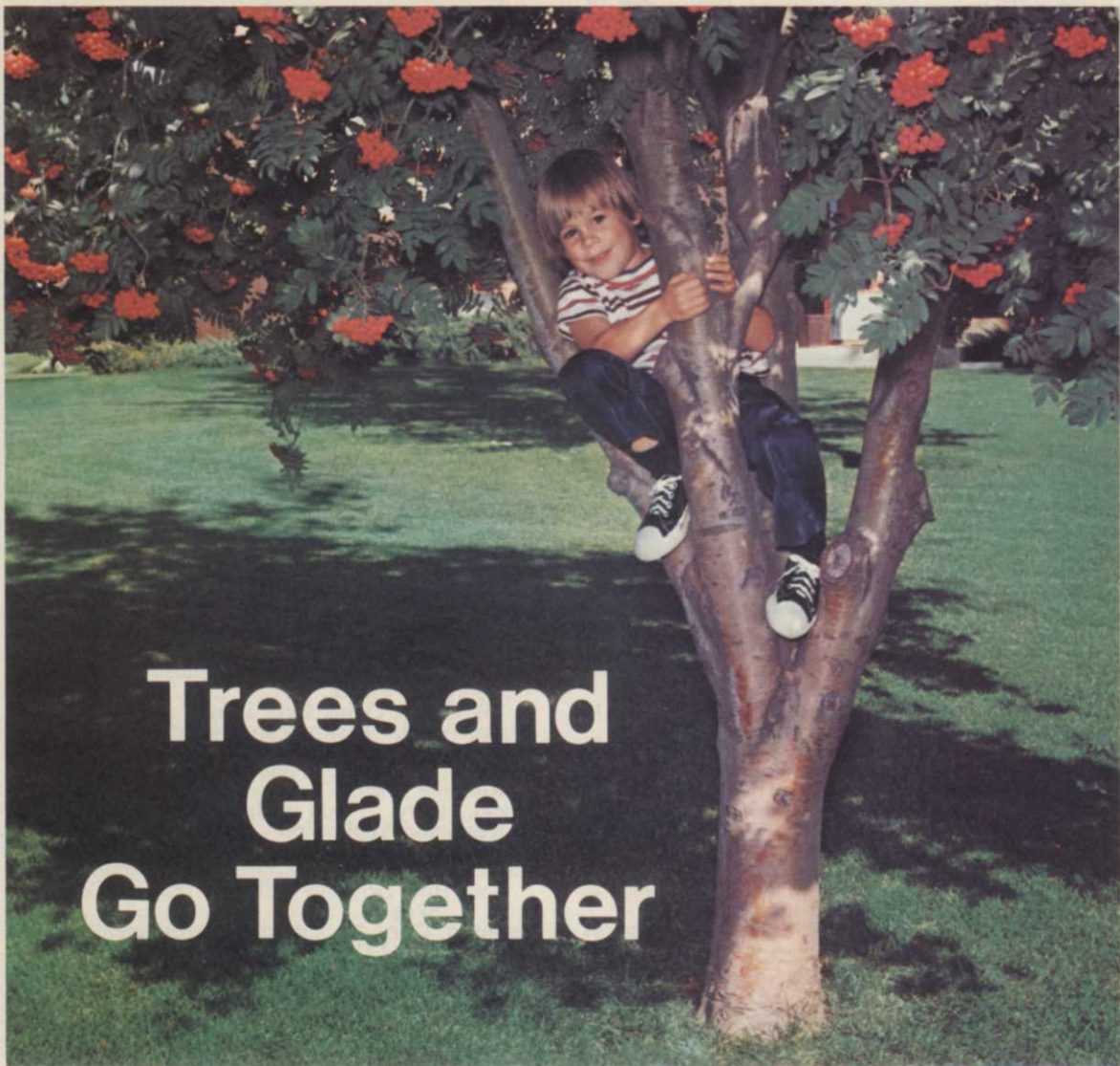
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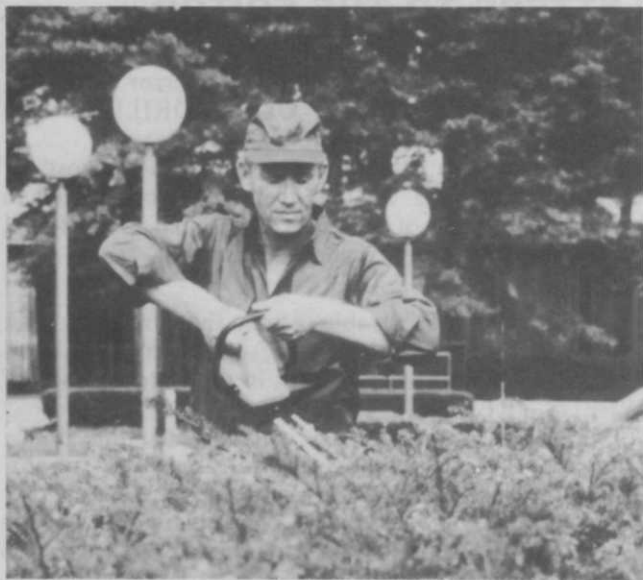
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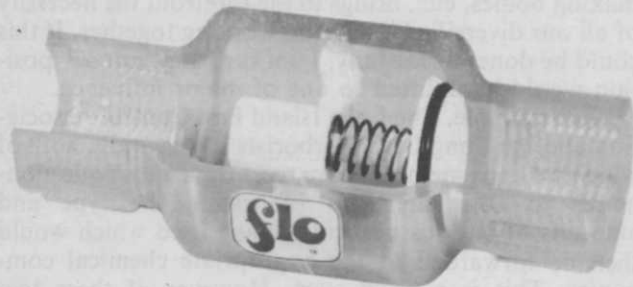
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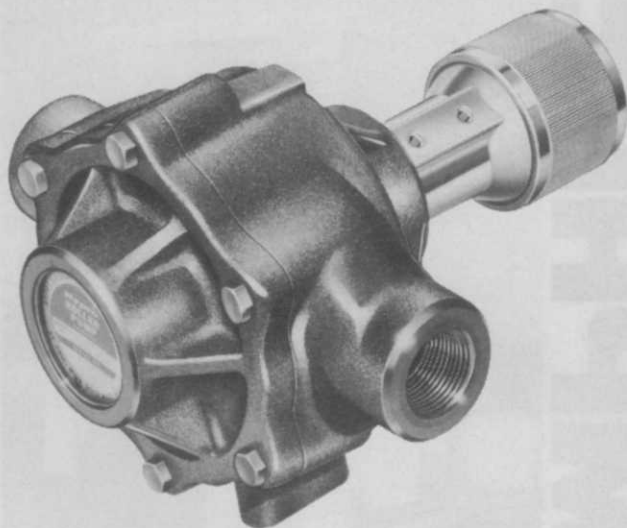
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PVC CHECK VALVE: Flo-Control, Inc., Burbank, Calif.

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SERIES 1700 PUMP: Hypro Division, Lear Siegler, Inc., St. Paul, Minn.

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FRATE LIFT: Brouwer Turf Equipment Limited, Keswick, Ontario

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LETTERS TO THE EDITOR

Dear Sir:

I would like to draw attention to an error in the article DAWN ATTACK . . . ON HYDRILLA which appeared in your June issue.

Reference was made to treatment rates and cost per treatment in terms of acre feet. All such references should be in terms of SURFACE ACRES. **Doug Jones, Advertising Manager, Applied Biochemists, Inc.**

Dear Sir:

It was with considerable dismay that I recently read "Infrared Aerial Photography — Easier Than you Think!" by Wildman and Clark in the October issue of WEEDS TREE and TURF.

. . . it has managed to convey in unmistakable language the ideas that color infrared film (photography) is heat-sensitive and that "previsual detection" was achieved. Neither is true. Color infrared film (either 2236 or 2443) is not heat-sensitive in any sense of the word. "Previsual" infers that plant stress is visible on the CIR photography before it is visible to the human eye. I know no one, including ourselves, who has done a great deal of work with applications of CIR to the plant sciences (forestry, agriculture, etc.) who have ever achieved true "previsual" detection. What is sometimes confused as "previsual", but technically is not, is when the stressed part (e.g., the top of a tree) is not visible on the ground, but can be seen from the air. But even in these cases, it will often be visible to the airborne human observer and on color film as well as CIR. **Merle P. Meyer, Director, Institute of Agriculture, Remote Sensing Laboratory, University of Minnesota, College of Forestry, St. Paul, Minnesota.**

Dear Sir:

Your editorial in the September, 1974 issue of WEEDS TREES AND TURF concerning our rather low priority on the lists of chemical manufacturers, law-making bodies, etc., brings to the forefront the necessity of all our diversified industries working together. If this could be done successfully, I am sure our "minor" position would be uplifted to one of major influence.

For example, The Long Island Pest Control Association and the Long Island Arborists Association, both of which we are a member, have recently sent out questionnaires to their members requesting the type and amounts of various pesticides being used which would then be forwarded to the appropriate chemical companies. This is a good start. However, if these two associations combined their data and forwarded it to the above companies, theoretically our influence with them would double. Now, take this effect and combine it with the sod growers, park superintendents, nurserymen, and other segments of the industry and we begin to really make ourselves felt.

A good first step in getting these associations to work together could be to develop a liaison between these groups using individual members. These liaisons, should: 1. be active in a local, state, or national association, 2. have some working knowledge of the association he is to liaison with.

Many associations are now actively working to educate the public, lobby for favorable legislation, and influence suppliers. Since many of the individual association problems are all our problems, it's time to get together. **W. William Abrams, Prudent Controls Corp., Copiague, New York.**

classifieds

When answering ads where box number only is given, please address as follows: Box number, c/o Weeds Trees and Turf, 9800 Detroit Ave., Cleveland, Ohio 44102.

Rates: All classifications 50¢ per word. Box number, \$1. All classified ads must be received by Publisher the 10th of the month preceding publication date and be accompanied by cash or money order covering full payment.

FOR SALE

DOUBLE EDGE sod cutter blades. Will fit any Ryan sod cutter. Works like double edge razor blade. Cuts much more sod per blade. Made to bolt on both ways. \$24.00 plus postage. New automatic sod loaders for direct loading to pallets, trucks or trailers. No workers needed on ground. Both products developed and designed by Hadfield. Write or call Glen Hadfield, 4643 Sherwood, Oxford, Michigan 48051. Phone 313 628-2000.

ARPS stump cutter teeth, top quality and best price in U.S.A., D. J. Andrews, Inc., 17 Silver St., Rochester, New York 14611. Call 716 235-1230.

WOOD SPLITTER attachment for your backhoe converts your backhoe to a splitter in less than 10 min. Build it yourself with our blueprints. Send \$27.50. Lupton Tree Service, 32 Martha St., Tiffin, Ohio 44883.

USED EQUIPMENT

FOR SALE: Sprayers: used and new; hydraulic and mist, all makes; Royal 20, 35, and 55 pumps. Used rotomist parts, big discount! Phone 313 665-5338 or 313 994-3110. Write: Ralph McFarland, 209 Pleasant Place, Ann Arbor, Michigan 48103.

SOD HARVESTER, mounted on John Deere 20-20 diesel. Iowa boom mounted on trailer with International semi tractor. Pallets. Rodgers sweeper with motor. 2 Ryan 18 inch sod cutters. 2 army half-tracks. Brillion seeder 10 ft. Ford fork lift tractor with duals. Eckert's Turf Nursery, 4633 Curtice Rd., Mason, Michigan 48854. Phone 517 676-2173.

FOR SALE — 11 gang Jacobsen mowers, 9 gang Roseman mowers, irrigation cable sprinkler with 4 inch rubber hose, 1200 feet 8 inch high pressure irrigation pipe. Wanted used Brouwer sod harvester, Anderson Rock picker. Schneider Sod Farm, R9, Quincy, Illinois 62301. Phone 217 224-1893.

JACOBSEN SEEDER Model 524-100 self-propelled unit. In excellent condition, used only 10 hours. \$1000.00. Write or call: Jim Walter, 624 Fairmont St., Latrobe, Pa. 15650. Phone 412 537-8778.

HYDRO-MULCHER: 1972 Bowie Victor 500, rotary gear pump, flotation tires, \$4,000.00. World of Green, Inc., 323 Crowley Rd., Arlington, Texas 76013. Phone 817 265-0346.

BRUSH CHIPPERS, aerial booms, hydro-Ax's, cable plows and trenchers. We buy and sell. Wright Tree Service, Equipment Division, Des Moines, Iowa. Phone 515 277-6467.

VERMEER Model 630 Stumper with only 10 hours use, excellent condition, \$3,200. Expert Tree Kare, phone 305 847-4264 Kissimmee, Florida.

FOR SALE: Vermeer M-12 power backfiller, used one season, excellent condition. Make offer. White Turf Engineering, Winchendon, Mass. 01475. Phone 617 297-0940/0941.

STUMP grinders, log splitters, chippers, sprayers, bucket trucks, all reconditioned; let us know your needs. Essco, 5620 Old Sunrise Highway, Massapequa, New York 11758. Phone 516 799-7619.

FOR SALE: 5 18" Ryan sod cutters with sulky rollers, excellent condition. Foxcroft Sod Farms, Glen Ellyn, Illinois. Phone 312 469-4638.

FOR SALE stump cutter. Vermeer model 1560, good condition \$2000.00. Phone 517 484-5780.

SEEDS

SOD QUALITY Merion Seed for discriminating growers. Fylking, Delta, Park, Newport, Nugget, Adelphi, Cheri, Glade and Baron bluegrasses as well as fine fescues. Also Manhattan fine leaved rye grass. We will custom mix to your specifications. Michigan State Seed Co., Div. of Vaughan-Jacklin Corp., Grand Ledge, Michigan 48837. Phone No. 517 627-2164.

HELP WANTED

TREE CARE SALES REPRESENTATIVES: The Davey Tree Expert Company has openings for Sales Representative in the southeast and mid-Atlantic Coast area. Must have Jr. College or four year degree and/or four to six years of sales experience in tree care or allied fields such as nursery, landscaping, forestry and retail garden stores. Will train the sales-oriented person who will be on salary. Later salary plus bonus arrangement with unlimited earnings for those who can sell our quality service. Write letter of application with resume to R. J. McCafferty, The Davey Tree Expert Co., 117 S. Walter, Kent, Ohio 44240. An equal opportunity employer.

DISTRIBUTORS for D. J. Andrews, Inc. stump cutter teeth, pockets and bolts. Best wholesale and retail price in U.S.A. Add to this exclusive area, local advertising at our expense, etc., and you have our story. D. J. Andrews, Inc., 17 Silver St., Rochester, N.Y. 14611. Call 716 235-1230, or 716 436-1515.

INDUSTRIAL WEED CONTROL — Immediate opening for an industrial weed control sales-service representative. Duties: sell weed control contracts during the winter months; service the same accounts during the balance of the year. A knowledge of soils, weed species and herbicides would be desirable. Salary based upon experience. Excellent fringe benefits. Send resume to: Dave Bassler, Western Soil Management, 1048 Route No. 22, Mountainside, New Jersey 07092.

SUPERINTENDENT, full, time management of nine woodland properties in Medfield, Dover, Sherborn, Needham and Natick, Massachusetts area totaling 1,215 acres. Knowledge of forest and park management, maintenance of vehicles and equipment and care of natural ice for skating. Ability to meet visiting public, direct staff and to prepare budget, manage receipts and disbursements. Health insurance, pension plan, attractive house, utilities, salary open. Reply Box 126, Weeds, Trees and Turf, 9800 Detroit Avenue, Cleveland, Ohio 44102.

GROUNDSMAN-GARDENER: Large mid-west zoological park needs competent groundsman to maintain and improve lawns, native trees and shrubs, floral areas, and tropical indoor plantings. Experience and pertinent education in horticulture, arboriculture, or landscaping preferred. Graded salary scale, beginning at \$8900 or \$9900. Liberal benefits. Reply to P.O. Box No. 342, Brookfield, Illinois 60513.

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JANUARY WTT

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50

trimmings

Bogus OSHA inspectors beware! The U. S. Department of Labor alerted employers to persons posing as OSHA inspectors. OSHA boss, John H. Stender, described several con games used by the phony inspectors. "Some will demand on-the-spot payment of penalties for conditions they claim violate OSHA rules," he said. "Others will point out so-called violations and suggest they can be corrected by a particular tool, machine or piece of equipment. These usually are followed a day or so later by an accomplice who offers to sell the employer the recommended items." OSHA inspectors carry special Labor Department credentials and if employers doubt the authenticity of an inspector, the identification number and inspector's name can quickly be verified by telephoning his home office.

University of Maryland scientists were granted a \$5,000 cooperative agreement with the U. S. Department of Agriculture to compile and analyze pesticide data. The purpose is to compile information on pesticide efficacy and toxicology so it can be stored and readily retrieved. Dr. Robert Menzer, professor of entomology at the university, is the project leader and William N. Sullivan, Jr., research entomologist, is the Agricultural Research Service representative.

In other USDA grants, Dr. P. K. Biswas, professor of plant and soil science, Tuskegee Institute, Alabama, is the leader of a project continuing investigations on the dormancy and germination behavior of seeds of selected weed species. The grant totals \$6,100.

Government Printing Office has made available three publications containing all federal job safety and health standards. Titles of the standards include: "Construction Safety and Health Regulations, Maritime Employment Safety and Health Regulations and General Industry Safety and Health Regulations." For more information contact Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

A new 16mm color film produced by the Extension Service at Ohio State University entitled, "Pesticides and You," presents the story of pesticides in an unbiased, unemotional way. The movie is designed to eliminate confusion and misunderstanding regarding pesticides and the environment. Available on loan for \$1.00 service charge from: Extension Film-TV Library, 2120 Fyffe Rd., Columbus, Ohio 43210.

Nearing the endangered species status is the American Elm. Colorado State Forest Service personnel recently sampled 1,309 elms and discovered 866 (66%) infected with Dutch Elm disease. Efficient sanitation measures and the use of insecticides seem the prudent course to buy additional time in hopes that a cure can be developed.

USDA has exempted transplants, if free of soil, from the list of fire ant and Japanese beetle regulations. Bare-root plants will not contribute to insect spread if substantially free of soil. Both ants and beetles lay eggs in soil and spend at least part of their life-cycle underground. Articles still regulated under the imported ant and beetle quarantines include: soil, sod, used mechanized soil moving equipment and plants with roots. Such regulated items must be inspected and certified "pest-free" before being shipped from infested to uninfested areas.

Greatest single challenge facing OSHA is developing health standards to protect workers from on-the-job hazards, said John Stender, head of the administration. OSHA will expand standards covering some 400 health standards within the next three years. Up to seven new health standards may be published by the end of the year.

Those nomad gluttons, the Gypsy Moths, munched their way through 750,000 acres of northeastern woodland this summer. They defoliated 1.7 million acres in 1973. The USDA attributes the decrease to a unique combination of weather conditions, insect virus, parasite control and extensive state, federal and private control programs.

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WEEDS TREES and TURF



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