WEEDS
TREES
and TURF
DECEMBER 1974

'Texas Tree Shovel'—
Over-the-road Tree Moving

A WTT Exclusive—
13 Associations
Look At Their Future
In The Green Industry

TRENDING EMPLOYEES
When the HEAT’S on

PENNCROSS can take it

CREEPING BENTGRASS

THE PROOF IS IN THE PUTTING

• Today’s most popular, widely adapted variety
• More genetically uniform and poa-free seed
• Germinates fast, establishes quicker, thicker
• Superbly consistent, less grain for true putts
• Greens up earlier, hold summer color better
• Stays alive longer in fall—year round in South
• Most winterhardy, disease-resistant bent available.

“Penncross Greens putt true & their even texture gives me confidence in putting.”

Pat Fitzsimons tied the world record score of 58 on a 6,000 yard course and is now a touring professional.

WORLD-WIDE DISTRIBUTOR
TEE-2-GREEN CORP.
1212 West Eighth Street
Kansas City, Missouri 64101
(816) 842-7825

Penncross Bentgrass green at a desert course in Southern California

For More Details Circle (119) on Reply Card
A W.I.N.ner fertilizes less often!

W.I.N.ners use fewer fertilizer applications . . . at no sacrifice in vigor or growth. They use Blue Chip® fertilizers containing W.I.N. (water insoluble nitrogen) from Nitroform® organic nitrogen.

W.I.N. from Blue Chip feeds turf for months because the nitrogen has different rates of release. Think about time-release cold capsules. It’s the same basic release idea.

How does a Blue Chip fertilizer treat your turf? Beautifully! Blue Chip helps you maintain green, vigorous turf. It feeds slowly and steadily to avoid the sudden growth that can induce stress. Even inexperienced labor can apply it without danger of burning. Once in the soil, it doesn’t leach away.

It’s tricky to maintain fine turf, but it’s a lot easier with Blue Chip on your side. You apply it less often than most nitrogen sources, so you’re way ahead in savings on labor, equipment use, and time.

Why not be a W.I.N.ner?
Feed turf with a Blue Chip fertilizer containing water insoluble nitrogen from Nitroform organic nitrogen.

For More Details Circle (118) on Reply Card
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—Genealogy 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. McKeeer 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

WTT 1974 ARTICLE AND AUTHOR INDEX 37

Copyright© 1974 by The Harvest Publishing Company

Member, American Business Press, Business Publications Audit ABP BPA

Single Copy Price: $1.00 for current and all back issues. Foreign $1.50. Subscription Rates: WEEDS TREES AND TURF is mailed free, within the U.S. and possessions and Canada, to qualified persons engaged in the vegetation care industry and related fields in controlled circulation categories. Non-qualified subscriptions in the U.S. and Canada are $10.00 per year; other countries, $12.00 per year. Application pending for controlled circulation postage paid at Fostoria, Ohio 44830.
"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 DuPont 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
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?
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.


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.
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)
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.

WRITE for detailed literature on all National Mowers

NATIONAL Mower Company
650 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**

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 withstands 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.

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

AQUILA PARADE
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: [ ] High [ ] Low 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, 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 Sense.

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.


TODAY, MORE THAN EVER, OUR MODULARMATICS MAKE SENSE!

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, ILLINOIS 60064

GENTLEMEN: We are interested in spraying DIPEL®
☐ Please phone me promptly. ☐ Have your representative visit. ☐ Mail literature.

Name ____________________________________ Acres ____________________
Title ____________________________________ Pest(s) ___________________
Address ___________________________________________________________
City, Zip ___________________________ By ground rig ☐ By air ☐
Phone No. ____________________________
Company, Twnsp., District, Etc. ______________________________

SEND TO: ABBOTT LABORATORIES, 900 West Route 70, Suite 6, Marlton, New Jersey 08053
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 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 organizational objectives 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)
Good looking greens are important to you, so you already understand the need for good aerating equipment.

But the good will of your golfers is important, too, so you want to keep your greens in play.

Our Greensaire team will aerate and process aerator cores in one simple operation. No longer will you have to rake up windrowed cores separately. This saves you time, money and keeps your greens in play.

Your golfers stay happy. You stay happy.

The first part of our aerating system, The Greensaire II, is ruggedly constructed to remove 36 clean cores from every square foot of turf. One pass relieves soil compaction. Holes are up to 3" deep and uniformly spaced on 2-inch centers. You're assured of straight in and out penetration. There are different size tines for different ground conditions.
The second half of the system, the Greensaire II Core Processor, attaches to the Greensaire II aerator. It conveys cores and plant matter over a perforated grate as soon as they're pulled from the ground. After breaking up on the grate, most of the loose soil is sifted back onto the turf through the grate as top dressing.

The remaining plant, thatch, roots and soil are carried to the top of the conveyor where they are sifted a second time. Remaining plant and thatch then go into a large removable bag. Up to 1000 square feet of green may be aerated before the bag needs emptying.

Only Ryan makes the Greensaire whole-in-one system, designed to save you time and money by combining two operations into one.

Protect your turf. And let your golfers play on through.
For more information, write:

RYAN TURF-CARE EQUIPMENT
OMC-LINCOLN A DIVISION OF OUTBOARD MARINE CORPORATION
2102 CUSHMAN DRIVE
P.O. BOX 82409
LINCOLN, NEBRASKA 68501
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) 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,
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.

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.

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.

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.
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 rye-grasses, 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 in-
sured. 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 equip-
ment against most losses. If this type
of coverage on equipment seems ex-
pensive, 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 ar-
borist will have to decide how much
of a loss he wishes to bear himself in
order to save premium.

A mandatory insurance cover-
age if employees are involved, is
workmen's compensation/employ-
ers liability. This is one of the
most costly insurance coverages
with which arborists are faced. Un-
fortunately, the experience of arbo-
rists 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 decreas-
ing 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 def-
initely a function of safety aware-
ness 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 car-
ried 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 possi-
ble through your insurance costs,

i.e., reduced premiums. There is a
variation in price of insurance pre-
mium, 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 alter-
nate 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 mar-
ket, 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 in-
dustry will be looking very closely at
their portfolios. Many arborists will
be requested by the insurance com-
panies to find alternate insurance
programs. This would be time-con-
suming 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 pro-
gram rather than a cut-rate insure-
ance package.
Western Association of Nurserymen, trade show and 85th annual convention, Plaza Inn, Kansas City, Mo., Jan. 5-7.


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


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


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.


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.


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


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.


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.
The Exciting New
TURFTYPE
Fine Leaved Perennial Ryegrass

GAME TURF TYPE
PERENNIAL RYEGRASS
FINE LEAVED GRASS WITH
MANY NEW
OUTSTANDING FEATURES!

A NEW VARIETY of Perennial Ryegrass . . . GAME, was developed in the Netherlands by a leading grass seed breeder.

GAME was bred from a selection of flat growing plants. All the plants collected showing characteristics desirable for lawn use were tested over a three year period under a system of close mowing. Only those plants which survived this test and showed the best of other traits were used in breeding GAME.

UNDER THE highest quality controlled conditions available, GAME is now being grown in Oregon on a Certified Basis.

GAME is extremely drought resistant, and in comparison to other varieties continues to show its great quality under dry conditions.

GAME has extremely high regrowth characteristics. It readily survives close mowing and hard wear.

For information call or write:
Willamette Seed & Grain Co.
Bob Lowry
503—926-8883
P. O. Box 791
Albany, Ore. 97321

Max Elder
503—491-3675
P. O. Box 25
Shedd, Ore. 97377

Milton Tuck
503—926-8883
P. O. Box 791
Albany, Ore. 97321

Bob Richardson
503—491-3675
P. O. Box 25
Shedd, Ore. 97377

For More Details Circle (124) on Reply Card
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 aforementioned 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 what 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.
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 buried 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 the 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.

### BARTLETT Tree Trimmer with Fiberglass Handle

Features single-pulley (1½" cap.) or double-pulley (1½" cap.) tree trimmer head section, and square-end mount pole saw head section with 4 ft., 6 ft. or 8 ft. extension sections with built-in, ALL-FIBERGLASS CONNECTING SLEEVE, and polypropylene rope.

Catalog free on request.

**BARTLETT MANUFACTURING CO.**

3009 E. Grand Blvd.

Detroit, Mich. 48202

Phone (Area 313) 873-7300

For More Details Circle (149) on Reply Card
Quality

Rolls Royce means quality. Quality performance, the standard by which others are judged. Another name synonymous with quality and performance is Jacklin. Jacklin, one of the world's largest producers of Kentucky bluegrasses and other varieties. When ordering seeds specify JACKLIN SEED.

JACKLIN PRODUCES:
Merion, 0217® Fylking, Glade, Cheri, Nugget, S-21, Newport, Delta, Geary, Park, Six, and Troy Kentucky bluegrass; Rathdrum and Reubens Canada bluegrass; Norlea Perennial ryegrass, Public and private varieties of Creeping Red, Nova Rubra, Chewings, and Hard fescues.

And Jacklin has produced on contract: Pennfine, N.K. 100, N.K. 200 and Pelo Perennial ryegrass. Jacklin is also a prime* contract producer of: Adelphi, Warren's A-34 and O.M. Scott's Windsor Kentucky bluegrass. Jacklin has built a reputation of fine quality and service for over 30 years. You can count on purity of content, high quality and sure germination.

*Available only through breeder and owner outlets.

Jacklin Seed Company
Division of the Vaughan-Jacklin Corporation

For More Details Circle (109) on Reply Card

Weeds Trees and Turf

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 SOCIOLOGY 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. Lanphere, secretary-treasurer; Walter P. Morrow, past president. Directors: Charles H. Michler; Arnold H. Webster; Walter J. Barrows; Wilfrid Wheeler, Jr.

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 Brinkman, 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. Woehrle, 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 assure 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 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
rated #1 for overall performance

MAN MADE

Adelphi
KENTUCKY BLUEGRASS
(U.S. Plant Patent No. 3150)

NOW SETS U.S. GOVERNMENT*
STANDARDS FOR THE
DARK GREEN COLOR OF
ALL FUTURE BLUEGRASSES!

*Source: Plant Variety Protection Office, U.S. Dept. of Agriculture

In 10 years of man-controlled parentage breeding and over 7 years of university and field testing, "Adelphi" has earned a top rating for overall performance.

"Adelphi" offers the features most wanted in turf, Professionals and home gardeners, alike, are making it the most widely accepted and universally acclaimed bluegrass in 30 years.

For good looks throughout the entire growing season...excellent density...good disease resistance and tolerance to moderately close mowing, it's...MAN-MADE "Adelphi"...A FIRST IN TURF!

For Details Contact:
J & L ADIKES, Inc.
Jamaica, N.Y. 11423

JONATHAN GREEN & SONS
Kearny, N.J. 07032

NORTHROP, KING & CO.
Minneapolis, Minn. 55413

VAUGHAN'S SEED CO.
Bound Brook, N.J. 08805 • Downers Grove, Ill. 60515

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 refereed 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) 223-2922
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 in 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.
Put a "gas blanket" between you and weed breakthrough.

CASORON® — for years leader in orchard, nursery, landscaping and industrial weed control — is now approved for use under asphalt. Use it where weeds and roots do the most damage: recreational courts, bicycle and golf cart paths, paved sidings, airport runways, parking lots, etc.

Works like nothing you've ever used before. Applied as a granular or wettable powder over the subgrade, CASORON soon begins to emit a weed-killing gas. Once the asphalt is applied, it traps the gas creating a long time blanket and protection against weed growth and weed breakthrough.

Why CASORON instead of sterilants: Simply because you can effectively kill weeds and stop root growth without risking damage to adjacent ornamentals. CASORON is a root inhibitor, ornamental roots will stop growing as they contact the gas blanket. They won't systematically translocate the herbicide. And they won't erupt through the blanket into the asphalt. Also, CASORON's blanket of protection stops weeds from germinating — but won't sterilize areas for future planting. Other uses: CASORON is highly effective around right-of-ways, curbs, landscaped areas and fences. Over 60 perennial and annual weeds and grasses can be controlled.

If asphalt is in your plans for the future, specify CASORON. It's a gas.

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

For More Details Circle (125) on Reply Card
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
Total membership: 400


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. Ilinciki, 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; 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.
### WEEDS TREES and TURF:

**1974 Article and Author Index**

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

#### A

<table>
<thead>
<tr>
<th>Title</th>
<th>Issue Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMVAC Chemical Corp Plans Attack on Aquatic Weeds</td>
<td>Feb. 64</td>
</tr>
<tr>
<td>ASCA Meeting Report, What Is The Real Value of A Tree (cr)</td>
<td>May 58</td>
</tr>
<tr>
<td>ASPA Convention Report, The Growing Sod Market (cr)</td>
<td>Sept. 18</td>
</tr>
<tr>
<td>ASPA Summer Meeting Slated For Maryland (cr)</td>
<td>Apr. 56</td>
</tr>
<tr>
<td>ASPA Winter Conference Slated For New Orleans (cr)</td>
<td>Jan. 60</td>
</tr>
<tr>
<td>(Accutrol) Fewer Weeds, Better Drift Control by Robert Eddy (fa)</td>
<td>Nov. 41</td>
</tr>
<tr>
<td>Ackley Mfg. Co. Name Changes to Stanley Hydraulics (ns)</td>
<td>Feb. 64</td>
</tr>
<tr>
<td>Adams, James W., New Vice President and General Manager for Toro Irrigation Division (ns)</td>
<td>Mar. 68</td>
</tr>
<tr>
<td>Agr. Chemical Association Names New Vice President (ns)</td>
<td>Sept. 22</td>
</tr>
<tr>
<td>Agr. Chemical Association Sells Education Kit (ns)</td>
<td>Apr. 72</td>
</tr>
<tr>
<td>Agricultural Chemicals Association, Two Honored by (ns)</td>
<td>Oct. 32</td>
</tr>
<tr>
<td>Alabama Student Wins Southern Turf Scholarship (ns)</td>
<td>Aug. 86</td>
</tr>
<tr>
<td>(Algaecides) Dawn Attack On Hydrla by Doug Jones (fa)</td>
<td>Jun. 38</td>
</tr>
<tr>
<td>American Garden Names New Vice President (ns)</td>
<td>Sept. 22</td>
</tr>
<tr>
<td>American Sod Growers Association Convention Planned For July (cr)</td>
<td>Jun. 28</td>
</tr>
<tr>
<td>American Sod Produces Association Summer Field Days (ed)</td>
<td>Aug. 10</td>
</tr>
<tr>
<td>Application, Custom, The Herbicide Market (fa)</td>
<td>Feb. CC</td>
</tr>
<tr>
<td>Applicator, Custom, Sales Up For Ohio (fa)</td>
<td>Mar. 18</td>
</tr>
<tr>
<td>Applicators, Certified, Commercial, EPA</td>
<td>Apr. 8</td>
</tr>
<tr>
<td>Aquatic Environment Described in EPA Book (ns)</td>
<td>Feb. 32</td>
</tr>
<tr>
<td>(Aquatic Weed Control) Dawn Attack On Hydrla by Doug Jones (fa)</td>
<td>Jun. 38</td>
</tr>
<tr>
<td>(Aquatic Weed Control) Preliminary Herbicide Tests Halt Growth of Cabomba (ns)</td>
<td>Apr. 66</td>
</tr>
<tr>
<td>(Aquatic Weed Control) Water Hyacinth Clearance Announced by Rodia (ns)</td>
<td>Jun. 45</td>
</tr>
<tr>
<td>Aquatic, AMVAC Chemical Corp. Plans Attack On (ns)</td>
<td>Feb. 64</td>
</tr>
<tr>
<td>Aquatic Weeds, The Herbicide Market by Jack Murnighan (fa)</td>
<td>Feb. 38</td>
</tr>
<tr>
<td>Arborist in the Witness Chair by Arnold Webster (fa)</td>
<td>Oct. 17</td>
</tr>
<tr>
<td>Arborist’s Insurance Market, The, by Stanley Loar (fa)</td>
<td>Dec. 14</td>
</tr>
<tr>
<td>Army Weed Controllers Transferred to USDA (ns)</td>
<td>Sept. 21</td>
</tr>
<tr>
<td>Associations, Meet the — Backbone of the Green Industry (cr)</td>
<td>Dec. 31</td>
</tr>
<tr>
<td>Austin Products Company, Formerly Known As Servis Equipment Co. (ns)</td>
<td>May 64</td>
</tr>
</tbody>
</table>

#### B

<table>
<thead>
<tr>
<th>Title</th>
<th>Issue Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic Rain Company Purchases Irrigation Industries, Inc. (gn)</td>
<td>July 8</td>
</tr>
<tr>
<td>(Awards) Ohio Turfgrass Conference, Green Grows the Business in Ohio (cr)</td>
<td>Feb. 18</td>
</tr>
<tr>
<td>BT, What Is (ns)</td>
<td>Mar. 16</td>
</tr>
<tr>
<td>Baltimore’s Sparrows Point, More Plan, Better Management (fa)</td>
<td>June 14</td>
</tr>
<tr>
<td>Banker, Harry, National Arbor Day Support Sought by (ns)</td>
<td>Mar. 60</td>
</tr>
<tr>
<td>Barnett Named President of ICI United States Inc. (ns)</td>
<td>Aug. 34</td>
</tr>
<tr>
<td>Bartlett, R. A. Elected President of F. A. Bartlett Tree Company (ns)</td>
<td>Jul. 39</td>
</tr>
<tr>
<td>Batteries, Golf Car, New Ratings Match Power To Use by Robert L. Balfour (fa)</td>
<td>Jan. CC</td>
</tr>
<tr>
<td>Battery Care, Positives and Negatives of by Arvid Halla (fa)</td>
<td>Jan. NN</td>
</tr>
<tr>
<td>Battery Life, Three Point Program Helps Increase (ns)</td>
<td>Feb. 30</td>
</tr>
<tr>
<td>(Beauty, Rita Gray) Author, The DDT Myth, Green Industry Book Report (br)</td>
<td>Apr. 10</td>
</tr>
<tr>
<td>Beetle, Japanese, Experimental Insecticide Controls (ns)</td>
<td>Jun. 46</td>
</tr>
<tr>
<td>Beetle, Japanese, Quarantine Extended In Six States (ns)</td>
<td>Apr. 44</td>
</tr>
<tr>
<td>(Benlate) DED Controls: Will Systemics Work by Richard J. Campana (fa)</td>
<td>May 16</td>
</tr>
<tr>
<td>Bent on Better Fairways by Dr. Johnny R. Thomas (fa)</td>
<td>Jan. 58</td>
</tr>
<tr>
<td>Bermudagrass Care Requires Many Inputs (ns)</td>
<td>Feb. 70</td>
</tr>
<tr>
<td>Bermudagrass, Forward Pass For by Charles Pyron (fa)</td>
<td>Jan. 12</td>
</tr>
<tr>
<td>Bermudagrass, North/South Transition Zone Ready For (ns)</td>
<td>Feb. 61</td>
</tr>
<tr>
<td>Bluegrass Insecticide Study Progress Report Presented (ns)</td>
<td>Mar. 72</td>
</tr>
<tr>
<td>Bonds and Bonding by John J. Curtin, Jr. (fa)</td>
<td>June 16</td>
</tr>
<tr>
<td>Borrowing, Essentials of by Dr. Eric Lawson (fa)</td>
<td>June 48</td>
</tr>
<tr>
<td>(Broadleaf Control) The Mississippi Method by John L. Snuggs (fa)</td>
<td>Jul. 11</td>
</tr>
<tr>
<td>Brush Control, Dormant, With Less Oil (fa)</td>
<td>Feb. 16</td>
</tr>
<tr>
<td>(Brush Control) Old Technique . . . New Look by Richard D. Locke (fa)</td>
<td>Aug. 22</td>
</tr>
<tr>
<td>(Brush Control) Target: Railroad Weeds by Richard W. Fields (fa)</td>
<td>Apr. 36</td>
</tr>
<tr>
<td>Brush Disposal — Problem to Profit (ns)</td>
<td>Oct. 42</td>
</tr>
<tr>
<td>Bucket Rescue, 11 Steps to Safety by Robert E. Jones (fa)</td>
<td>May 21</td>
</tr>
</tbody>
</table>

#### C

<table>
<thead>
<tr>
<th>Title</th>
<th>Issue Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabomba, Preliminary Herbicide Tests Halt Growth of Cabomba (ns)</td>
<td>Apr. 66</td>
</tr>
<tr>
<td>(Cal-Turf, Inc.) Netting for Sod, Reality From Imagination (fa)</td>
<td>Apr. 54</td>
</tr>
<tr>
<td>California Distributorship Established by Vermeer (ns)</td>
<td>Apr. 64</td>
</tr>
<tr>
<td>Case, J. I., Outdoor Power Equipment Div. Expands Production Facilities (gn)</td>
<td>Aug. 8</td>
</tr>
<tr>
<td>(Casoron) The Case of the Invisible Vapor Barrier by Donald Fox (fa)</td>
<td>Aug. 11</td>
</tr>
<tr>
<td>Certification Programs, State Pesticide Applicator, No Funds Available to Subsidize (gn)</td>
<td>Jul. 8</td>
</tr>
<tr>
<td>Chain Saws Hot Property, Says Echo Marketing Boss (ns)</td>
<td>Mar. 51</td>
</tr>
<tr>
<td>Title</td>
<td>Issue/Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Echo Chain Saw Division Hosts Distributor Meeting</td>
<td>Nov. 22</td>
</tr>
<tr>
<td>Energy Conservation Tips Available From Toro Co.</td>
<td>Apr. 74</td>
</tr>
<tr>
<td>Energy Crisis and Their Impact</td>
<td>Apr. 16</td>
</tr>
<tr>
<td>Energy Crisis on Agenda, Golf Foundation Meets</td>
<td>Mar. 51</td>
</tr>
<tr>
<td>(Energy Crisis) Where Are They Now?</td>
<td>Apr. 6</td>
</tr>
<tr>
<td>(Energy Shortages) People Power — An Energy Source</td>
<td>Jan. 6</td>
</tr>
<tr>
<td>EPA Book Describes Aquatic Environment</td>
<td>Feb. 32</td>
</tr>
<tr>
<td>EPA Plans Effort to End Nine Poisonous Substances</td>
<td>Mar. 52</td>
</tr>
<tr>
<td>Environmental Stress Victimizes Windbreaks</td>
<td>May 60</td>
</tr>
<tr>
<td>Florida Turf-Grass Assoc. Changes Meeting</td>
<td>Nov. 22</td>
</tr>
<tr>
<td>FMC Builds Plant in Aiken, S.C.</td>
<td>Mar. 51</td>
</tr>
<tr>
<td>FMC Holds School for Distributor Service Managers</td>
<td>Dec. 28</td>
</tr>
<tr>
<td>FIFRA, Sections Four of, Becomes Final</td>
<td>Oct. '74 (gn)</td>
</tr>
<tr>
<td>Faculty Award, Distinguished, Given to Forest Geneticist</td>
<td>Apr. 64</td>
</tr>
<tr>
<td>F.A.N.N.I.E. Award, 1973 Presented to Bryson James</td>
<td>Apr. 72</td>
</tr>
<tr>
<td>Felix, Robert, NAA's, Named Exec. Secretary</td>
<td>May 12</td>
</tr>
<tr>
<td>Fertigation: Double Duty For Your Irrigation System</td>
<td>Jul. 22</td>
</tr>
<tr>
<td>Fertigation: Double Duty For Your Irrigation System</td>
<td>Jul. 23</td>
</tr>
<tr>
<td>(Fertilization) $20 Thousand In Savings Through Labor Management By Chet Wender</td>
<td>Febr. 14</td>
</tr>
<tr>
<td>Fertilizer, Young Innovators Introduce</td>
<td>May 54</td>
</tr>
<tr>
<td>Fertilizer Shortages, Chemist Predicts</td>
<td>Nov. 41</td>
</tr>
<tr>
<td>Fire Extinguishers, Aluminum-shelled Dry Chemical, to be Tested At 12-Year Intervals</td>
<td>Feb. 12</td>
</tr>
<tr>
<td>Forest Geneticist</td>
<td>Mar. 51</td>
</tr>
<tr>
<td>Forest Service, U.S., Plans Go-Ahead for DDT</td>
<td>May 63</td>
</tr>
<tr>
<td>Forest Service, U.S., Permits Issued</td>
<td>Mar. 51</td>
</tr>
<tr>
<td>Forest Service, U.S., Plans Go-Ahead for DDT</td>
<td>May 63</td>
</tr>
<tr>
<td>Forestry Program, A Community, Shade Trees For Cities</td>
<td>Mar. 51</td>
</tr>
<tr>
<td>Fortikul, Bill Johnson Uses, Equipped With Torque Converter</td>
<td>Mar. 51</td>
</tr>
<tr>
<td>Foxy, Dr. Chester L., Resumes Position as Editor Of Weed Science</td>
<td>June 42</td>
</tr>
<tr>
<td>Foy, Dr. Chester L., Resumes Position as Editor Of Weed Science</td>
<td>June 42</td>
</tr>
<tr>
<td>Freeport Minerals Company Announces Sulphur Price Rise</td>
<td>May 63</td>
</tr>
<tr>
<td>Fuel Conservation Essential For U.S. and World</td>
<td>Mar. 32</td>
</tr>
<tr>
<td>(Fungicides) Disease Control Planning is Needed</td>
<td>Mar. 10</td>
</tr>
<tr>
<td>(Fungicides) More Play, Better Management, Baltimore's Sparrows Point</td>
<td>June 14</td>
</tr>
<tr>
<td>(Charles Machine Works) Manufacturer Finds Success In Prairie</td>
<td>June 18</td>
</tr>
<tr>
<td>Chelated Micronutrients From New Plant</td>
<td>May 60</td>
</tr>
<tr>
<td>Chemical Composition of Trade Names</td>
<td>Mar. 74</td>
</tr>
<tr>
<td>Chemical, New, Promises Control of Johnsongrass</td>
<td>Mar. 72</td>
</tr>
<tr>
<td>Chemical Weed Control Results In Cleaner Air</td>
<td>Apr. 75</td>
</tr>
<tr>
<td>(Chippers) Labor Cost Savings in Colorado</td>
<td>Mar. 37</td>
</tr>
<tr>
<td>Chloridane Capacity Boosted By Velsicol</td>
<td>May 62</td>
</tr>
<tr>
<td>Chlorosis, Creative Cure For by Warren D.</td>
<td>July 44</td>
</tr>
<tr>
<td>Ciba-Geigy /Funk Merge</td>
<td>Sept. 21</td>
</tr>
<tr>
<td>Ciba-Giegy Move Announced</td>
<td>Oct. 41</td>
</tr>
<tr>
<td>Club Car of Augusta Ga. Acquired by Johns-Manville</td>
<td>Jan. 68</td>
</tr>
<tr>
<td>Collier Carbon &amp; Chemical Corp. Construct New Fertilizer Plant</td>
<td>Oct. 8</td>
</tr>
<tr>
<td>Conservation, Energy, Tips Available From Toro Co.</td>
<td>Apr. 74</td>
</tr>
<tr>
<td>Contaminants, Turf, by Dale E. Kerns. (fa)</td>
<td>Mar. 76</td>
</tr>
<tr>
<td>Couch, Dr. Houston B., Diseases of Turfgrasses</td>
<td>Mar. 13</td>
</tr>
<tr>
<td>Couch, Dr. Houston B., Probing the Unseen, The Cover Story</td>
<td>Mar. 10</td>
</tr>
<tr>
<td>Crime, Undercover Agents Fight Green Industry</td>
<td>Feb. 78</td>
</tr>
<tr>
<td>Cushman/Ryan Grant Aids Turf Grooming Study</td>
<td>Nov. 46</td>
</tr>
<tr>
<td>(Cutrine) Dawn Attack ... On Hydridilla by Doug Jones (fa)</td>
<td>June 38</td>
</tr>
<tr>
<td>D DDT, Contingency Use of Granted (fa)</td>
<td>Apr. 14</td>
</tr>
<tr>
<td>DDT Myth, The, Green Industry Book Report (br)</td>
<td>Apr. 10</td>
</tr>
<tr>
<td>DDT, U.S. Forest Service Plans Go-Ahead For (ns)</td>
<td>May 63</td>
</tr>
<tr>
<td>DED Controls: Will Systemics Work by Richard J. Cartman (fa)</td>
<td>May 16</td>
</tr>
<tr>
<td>(DED) Tree Care: Helping Nature With Science by D. I. Dodds (fa)</td>
<td>Jan. 14</td>
</tr>
<tr>
<td>(Dasanit 15G) Nematode Control Pays by Dr. R. V. Sturgeon, Jr. (fa)</td>
<td>Apr. 18</td>
</tr>
<tr>
<td>Dealer Award, Outstanding, Presented to Porter Bros. (ns)</td>
<td>Apr. 50</td>
</tr>
<tr>
<td>Dealer Award, Outstanding, Presented to Watson Dist. (ns)</td>
<td>Apr. 64</td>
</tr>
<tr>
<td>(Delnet) Plastic Netting — Continuing Research (fa)</td>
<td>Aug. 26</td>
</tr>
<tr>
<td>DeSalvo Elected President of Pesticide Association (ns)</td>
<td>Oct. 32</td>
</tr>
<tr>
<td>(Diamond Shamrock) The Herbicide Market Custom Application (fa)</td>
<td>Feb. 22</td>
</tr>
<tr>
<td>Dieldrin and Aldrin, EPA's Intention to Suspend Label Registrations (gn)</td>
<td>Sept. 8</td>
</tr>
<tr>
<td>(Dipel) What is BT (ns)</td>
<td>Mar. 16</td>
</tr>
<tr>
<td>Disease Control Planning is Needed (ns)</td>
<td>Mar. 10</td>
</tr>
<tr>
<td>Diseases of Ornamentals Subject of Texas Research</td>
<td>Aug. 36</td>
</tr>
<tr>
<td>Diseases of Turfgrasses by Dr. Houston E. Couch (br)</td>
<td>Mar. 13</td>
</tr>
<tr>
<td>Dow Chemical Announces New Plant for Production of Fumazone Nematicide (gn)</td>
<td>Nov. 10</td>
</tr>
<tr>
<td>(Drip Irrigation) Automatic Watering System — Cutting Chemicals Costs (fa)</td>
<td>Nov. 38</td>
</tr>
<tr>
<td>Drip Irrigation Lessens Nitrate Runoff (ns)</td>
<td>Mar. 84</td>
</tr>
<tr>
<td>(Drip Irrigation) San Diego Drip Exhibit Slated For July (ns)</td>
<td>June 42</td>
</tr>
<tr>
<td>EPA Book Describes Aquatic Environment (ns)</td>
<td>Feb. 32</td>
</tr>
<tr>
<td>EPA Plans Effort to End Nine Poisonous Substances (gn)</td>
<td>May 32</td>
</tr>
<tr>
<td>EPA Ruling on Use of DDT for Control of Tussock Moth Coming (gn)</td>
<td>Mar. 14</td>
</tr>
</tbody>
</table>
(Fungicides, Systemic) DED Controls: Will Systemics Work by Richard J. Campana (fa) May 16

Fylking, Official Grass of Expo '74 (ns) June 42

G

GCSAA Conference and Show, Turfgrass: The People Pleaser (cr) Apr. 20

GCSAA Forms Educational Advisory Council (ns) Oct. 24

Glade Kentucky Bluegrass Now Available (ns) Feb. 32

Golf Car Batteries, New Ratings Match Power to Use by Robert L. Balfour (fa) Jan. CC

Golf Car Trouble-Shooting by Charles W. Poole (fa) Jan. HH

(Golf Cars) Nine Points For Smooth Running Engines by Daniel L. Hedglin (fa) Jan. FF

Golf Cars Private vs. Club Ownership by Denver Brown (fa) Jan. DD

Golf Course Architect William F. Gordon Dies (o) Apr. 64

Golf Course Builders Elect New Officers (ns) Apr. 60

Golf Course Builders Hold Third Annual Meeting (cr) Feb. 78

(Golf Course) Skill, Hard Work Revive Dying Course (fa) Nov. 32

Golf Course In His Majesty's Honor (fa) Mar. 22

Golf Course Irrigation Installation, A Family Affair for 'Formost' (fa) July 30

(Golf Course Maintenance, Allocating Resources For) New Book Stresses Labor (ns) July 43

(Golf Course Management) More Play, Better Management, Baltimore's Sparrows Point (fa) June 14

(Golf Course) My Reasons for Trees (fa) Sept. 10

(Golf Course) Nematode Control: Wise Insurance by John Weseloh (fa) June 29

(Golf Course) Rush Hour On the Golf Course (fa) Apr. 30

(Golf Course) Simplified Nematode Control on Golf Greens (fa) Mar. 24

(Golf Courses) Disease Control Planning is Needed (ns) Mar. 10

Golf Courses, The Herbicide Market by Stan Frederiksen (fa) Feb. FF

Golf Development, What's Happening in, by Harry C. Eckhoff (fa) Jan. 10

Golf Foundation Meets — Energy Crisis on Agenda (ns) Mar. 51

Gordon, William F., Golf Course Architect Dies (o) Apr. 64

(Grass) Fine Fescues Right for Road-Side Uses (ns) Mar. 56

(Glass Floratam, Hits Consumer Market (ns) May 62

(Grass) Glade Kentucky Bluegrass Now Available (ns) Feb. 32

Grass Production Practices Urged to Reduce Pollution (ns) Mar. 72

Grass Seed Prices Up Farmer Interest Down (ns) Apr. 31

Grass Seed Production Continues in Oregon (ns) May 50

Green Industry Crime, Undercover Agents Fight (ns) Feb. 78

Green is for Go (fa) Feb. 65

Greenfield Brand Trademarks Sold to Lebanon Chemical (ns) Apr. 64

(Guardian Tree Experts, Inc.) Beyond The Call of Duty (ns) May 73

(Guardian Tree Experts, Inc.) Pre-Selling Shade Tree Care (fa) Nov. 34

Gypsy Moth Threat to the Midwest (ns) Mar. 16

Gypsy Moths Found in two New Locations (ns) Oct. 24

H

Hammen Brothers Sod Company Named Associate Grower (ns) July 42

Herbicide Antidote Gains Recognition for Stauffer (ns) Nov. 22

Herbicide, Controversial, Defended by Scientist (ns) Aug. 65

(Herbicide) Industrial Roundup Uses

DECEMBER 1974

Approved by EPA (ns) June 50

(Herbicide Market) Golf Courses by Stan Frederiksen (fa) Feb. FF

Herbicide Study Detects Minute Runoff (ns) Apr. 75

Herbicide Tests, Preliminary, Halt Growth of Cabomba (ns) Apr. 66

(Herbicide) The Case of the Invisible Vapor Barrier by Donald Fox (fa) Aug. 11

(Herbicides) Complex Environment, 10 Million Acres of Turf by Gary Johnson (fa) Feb. TT

(Herbicides) Cool Weather Weed Control by Robert W. Schery (fa) Sept. 15

Herbicides for Commercial Sod: How Do They Influence The Crop by John A. Jagschitz and C. R. Skogley (fa) June 22

Herbicides, Maryland Agrofum Details Why They Don’t Work (ns) Apr. 70

(Herbicides) More Play, Better Management, Baltimore's Sparrows Point (fa) June 14

(Herbicides) Rush Hour on the Golf Course (fa) Apr. 30

(Herbicides) Spike® by Elanco Receives EPA Clearance (ns) Nov. 24

(Herbicides) The Herbicide Market, Highway Weeds by A. Pete Nicas (fa) Feb. VV

(Herbicides) The Mississippi Method — A Weed Control Program by John L. Snuggs (fa) July 11

Herbicides, 2,4,5-T, EPA Withdraws Formal Hearings on (gn) July 8

(Herbicides) Utility Weed Control by Richard E. Abbott (fa) Feb. JJ

(Highway Weed Control) The Mississippi Method by John L. Snuggs (fa) July 11

Highway Weeds, The Herbicide Market by A. Pete Nicas (fa) Feb. VV

Hyacinth Control Convention Report (cr) Sept. 22

Hyacinth Control Society Meets July (nr) June 37

Hydrilla, Dawn Attack on by Doug Jones (fa) June 38

"Bunton lawn-turf equipment is built to take a beatin'...it's tough! Like this self-propelled riding mower. Equipped with a cushiony seat and power steering, it can turn on a dime! It can even go over a pile of rocks and still come out cuttin'!" So listen to Rocky Graziano...send for more information today...with Bunton, you can’t lose! Available from 8-inch to 52-inch cut.

BUNTON Co. 4300 Poplar Level Road. Louisville, Kentucky 40213 U.S.A Phone 502-459-3810 Telex 204-340

For More Details Circle (111) on Reply Card
Pesticide Shortages Studied by Industry (ns) Mar. 86
Permits Issued, U.S. Forest Service (ns) Mar. 51
Paper, Fiber for Making Discussed in Bulletin (ns) May 62
Pesticide Analysis, Research Contract
Pest Services, Outdoor, Offered to Green Industry (ns) Aug. 34
Pesticide Association, DeSalvo Elected President (ns) Oct. 32
Pesticide Law, Federal, U.S. Army Corp of Engineers Granted Emergency Exemption (gn) July 8
Pesticide Law, Industry Spokesmen Discuss (cr) Mar. 74
Pesticide Laws Being Debated (ed) Sept. 6
Pesticide Shortages Studied by Industry (ns) Mar. 86
Pesticides Law Being Debated (ed) Sept. 6
Pesticide, Minor Use, Temporary Coordinator For (ns) Oct. 26
Pesticide, Proper Use of, Outlined at WSSA (ns) Apr. 60
Pesticides, Standardized Symbols Proposed For (ns) July 39
Pickseed West Expands (ns) July 43
Pine Tip Moth, Torrance Recovers From (fa) May 13
Plants Have Nerves Says Cornell Biologist (ns) Mar. 83
Plastic Netting — Continuing Research (fa) Aug. 26
Poa Anna Control, Scotts, Plus Fertilizer Available (ns) Mar. 46
Poison Treatment Chart Available (ns) Mar. 13
Porter Bros., Outstanding Dealer Award Presented to (ns) Apr. 50
Price Controls, Phase IV, Rules on Sod Production (ns) Apr. 60
Price Increases Ago, Consumer Lawn and Garden Products Announced (gn) Jan. 8
Prices, Grass Seed, Up, Farmer Interest Down (ns) Apr. 31
Probing The Unseen (Cover Story) (fa) Mar. 10
Protection, Service and Profit by John Lariviere (fa) Sept. 12
Pump and Engine Care (Irrigation) by Ray Lariviere (fa) Jan. 22
Quarantine, Japanese Beetle Extended In Six States (ns) Apr. 44
Railroad Elimination Challenged by Vistron (ns) May 62
Railroad Weeds, Target by Richard W. Fields (fa) Apr. 36
Ramrods, Let's Put To Work (ed) Mar. 8
Ramsey Seed Forms New Marketer (ns) July 42
Registration on Fuels and Fuel Additives, EPA has Proposed Regulations to Require (gn) Aug. 4
Respirator Certification Hearings Postponed (gn) July 8
Rhodia Announces Water Hyacinth Clearance (ns) June 45
Rights-Of-Way, New, Need Quick Green Growth (ns) July 40
(Rogala Public Links Golf Course) Hard Work, Skill Revive Dying Course (fa) Nov. 32
Roundup, Industrial, Uses Approved by EPA (ns) June 50
(Russell, Jack,) Simplified Nematode Control on Golf Greens (ns) Mar. 24
Ryan Announces Move (ns) Aug. 31
(Ryan Turf Care Equipment) Microfiche Catalog System Speeds Parts Indexing (ns) May 60
Ravin Turf Care Equipment (Ryan Turf Care Equipment) Microfiche Catalog
R. Linton, M. Robey (fa) Nov. 12
Paper, Fiber for Making Discussed in Bulletin (ns) May 62
Permits Issued, U.S. Forest Service (ns) Mar. 51
Pest Management Degree Offered at UC Riverside (ns) Oct. 28
Pest Management Director Gives Nod to Integration (ns) Apr. 64
Pest Services, Outdoor, Offered to Green Industry (ns) Aug. 34
Pesticide Analysis, Research Contract
Pesticide Association, DeSalvo Elected President (ns) Oct. 32
Pesticide Law, Federal, U.S. Army Corp of Engineers Granted Emergency Exemption (gn) July 8
Pesticide Law, Industry Spokesmen Discuss (cr) Mar. 74
Pesticide Laws Being Debated (ed) Sept. 6
Pesticide Shortages Studied by Industry (ns) Mar. 86
Pesticides Law Being Debated (ed) Sept. 6
Pesticide, Minor Use, Temporary Coordinator For (ns) Oct. 26
Pesticide, Proper Use of, Outlined at WSSA (ns) Apr. 60
Pesticides, Standardized Symbols Proposed For (ns) July 39
Pickseed West Expands (ns) July 43
Pine Tip Moth, Torrance Recovers From (fa) May 13
Plants Have Nerves Says Cornell Biologist (ns) Mar. 83
Plastic Netting — Continuing Research (fa) Aug. 26
Poa Anna Control, Scotts, Plus Fertilizer Available (ns) Mar. 46
Poison Treatment Chart Available (ns) Mar. 13
Porter Bros., Outstanding Dealer Award Presented to (ns) Apr. 50
Price Controls, Phase IV, Rules on Sod Production (ns) Apr. 60
Price Increases Ago, Consumer Lawn and Garden Products Announced (gn) Jan. 8
Prices, Grass Seed, Up, Farmer Interest Down (ns) Apr. 31
Probing The Unseen (Cover Story) (fa) Mar. 10
Protection, Service and Profit by John Lariviere (fa) Sept. 12
Pump and Engine Care (Irrigation) by Ray Lariviere (fa) Jan. 22
Quarantine, Japanese Beetle Extended In Six States (ns) Apr. 44
Railroad Elimination Challenged by Vistron (ns) May 62
Railroad Weeds, Target by Richard W. Fields (fa) Apr. 36
Ramrods, Let's Put To Work (ed) Mar. 8
Ramsey Seed Forms New Marketer (ns) July 42
Registration on Fuels and Fuel Additives, EPA has Proposed Regulations to Require (gn) Aug. 4
Respirator Certification Hearings Postponed (gn) July 8
Rhodia Announces Water Hyacinth Clearance (ns) June 45
Rights-Of-Way, New, Need Quick Green Growth (ns) July 40
(Rogala Public Links Golf Course) Hard Work, Skill Revive Dying Course (fa) Nov. 32
Roundup, Industrial, Uses Approved by EPA (ns) June 50
(Russell, Jack,) Simplified Nematode Control on Golf Greens (ns) Mar. 24
Ryan Announces Move (ns) Aug. 31
(Ryan Turf Care Equipment) Microfiche Catalog System Speeds Parts Indexing (ns) May 60
S
SWSS, Graduate Students Win Honors At (ns) Mar. 50
(SWSS) Industry Spokesmen Discuss Pesticide
One quick trip down and back is all it takes. With Myers.

This could be the best thing that ever happened to your turf maintenance program. With a Myers TL32TM golf course sprayer, you can cover the whole width of a fairway in just two passes – covering a full 70 ft. at a time. The sprayer’s powerful 32” fan sends out spray in a ground-hugging pattern 40’ to 50’ on each side. It really does a job with fungicides, keeps your fairways in tip-top playing shape and does it in a lot less time than you’d expect. On top of that, the sprayer can be converted with the P70 attachment for tall shade tree applications to 80 ft. The TL32 really cuts those big fairway jobs and tall trees down to size. Interested in finding out more? Ask about the TL32TM today at your Myers TurfLine dealer’s.

Myers

For More Details Circle (104) on Reply Card
Tiemann, Norbert T., *Let's Put the Railroads The Case of the Texas Turfgrass Conference* The Energy Crisis Texas Landscape Architects Meet in San Antonio (ns) Mar. 52
(Texas Turfgrass Conference) The Energy Crisis and The Turf Industry (cr) Apr. 16
(Thompson-Hayward Chemical) The Case of the Invisible Vapor Barrier by Donald Fox (fa) Aug. 11
Tiemann, Norbert T., Let's Put the Railroads to Work (ed) Mar. 8
Timber, Western Exports Banned by USDA (ns) May 6
Toro Co., Energy Conservation Tips Available from (ns) Apr. 74
Toro Company Reports Record Six Months Sales (ns) Apr. 66
Toro Dealers, Portable Bubble Displays Ready for (ns) Mar. 32
Toro Dealers, Pre-Packaged Parts Display for Non-Service (ns) May 51
Toro Developes Pocket-Size Slide Chart (ns) Mar. 81
Toro Irrigation Division Has New Vice President and General Manager (ns) Mar. 68
Toro, New Utility Vehicle Coming From (ns) Mar. 50
Toro, Sod Service School Held By (ns) Mar. 32
Toro, New Utility Vehicle Coming From (ns) Mar. 52
Toro, Spartan Fund Study (ns) June 46
Toro's Irrigation Classes Offered at Five Locations (ns) Oct. 32
Torrance Recovers From Pine Tip Moth (fa) May 13
(Toward A Cleaner Environment) EPA Book on Aquatic Environment (ns) Feb. 32
Training Courses from OSHA (ns) Apr. 66
(Tree Business) OSHA and the Tree Man by Robert Felix (fa) June 8
Tree Care Firms, Extra Cash from Firewood Helps (ns) Mar. 52
Tree Care: Helping Nature with Science by D. I. Dodds (fa) Jan. 14
Trees, Are Your, Starving to Death by Harold Davidson (fa) June 20

(HANNAY REELS KEEP H.O.S.E. ON THE JOB)

You can handle more hose, handle it faster, easier and with greater safety when you install Hannay reels on your spray equipment. Reel handling will keep your hose in service longer, too. Choose your reels from the widest selection of sizes and rewind options for standard or high pressure service. They're all described in Catalog H-6612-ID. Send for your copy.

HANNAY REELS
CLIFFORD B. HANNAY & SON, INC. WESTERLO, NEW YORK 12193

For More Details Circle (113) on Reply Card

(Trees) Beyond the Call of Duty or Some People Will do Anything for Money (ns) May 73
(Trees) Creative Cure for Chlorosis by Warren D. Wolfe (fa) July 44
(Trees) DED Controls: Will Systemics Work? by Richard J. Campana (fa) May 16
(Trees) Environmental Stress Victimizes Instant Shade Trees . . . Texas Style ... by Albert H Korenek (fa) Dec. 10
(Trees) Pre-Selling Shade Tree Care (fa) Nov. 34
(Trees), My Reasons for (fa) Sept. 10
(Trees) Protection, Service and Profit by John Z. Duling (fa) Sept. 12
(Trees), Shade, For Cities, A Community Forestry Program by Dr. John W. Andresen and Philip R. Dolberg (fa) May 26
(Trees) Sycamore Blight Infection Triggered by Wet Weather (ns) Apr. 64
(Trees) Torrance Recovers From Pine Tip Moth (fa) May 13
(Trees) What is the Real Value of a Tree (fa) May 58
(Trees) Young Innovators Introduce Spike Method of Fertilization (fa) May 54

(Turf) A Complex Environment . . . 10 Million Acres of Turf by Gary Johnson (fa) Feb. TT
(Turf) Bent on Better Fairways by Dr. Johnny R. Thomas (fa) Jan 58
Turf Conference Report, Midwest Regional (cr) Apr. 40
Turf Contaminants by Dale E. Kern (fa) Mar. 76
(Turf Disease) Probing the Unseen, The Cover Story (fa) Mar. 10
(Turf Drainage) P.A.T. Takes to the Field by Wm. Daniel, M. Robey, R. Linton (fa) Nov. 12
(Turf) Forward Pass for Bermudagrass by Charles Pyron (fa) Jan. 12

(Turf Industry, The Energy Crisis and the (cr) Apr. 16
(Turf) Nematode Control Pays by Dr. R. V. Sturgeon, Jr. (fa) Apr. 18
(Turf) Nematode Control: Wise Insurance by John W. Andresen (fa) June 29
(Turf) Products Training Offered by Toro (ns) Dec. 23
Turf Protection Directory, 1974 (fa) Aug 37
(Turf) ProTurf Hosts 90 Europeans (ns) Oct. 30
Turf Research, Future of, Toward the Basics (ns) Jan. 56
Turf Scholarship, Southern, Alabama Student Wins (ns) Feb. 86
(Turf) Sod Production in the Pacific Northwest by Roy L. Goss (fa) June 31
(Turf) Sod, Water, and A System by Henry W. Indyk (fa) July 36
(Turf) The Herbicide Market Golf Courses by Stan Frederiksen (fa) Feb. FF

(Turfgrass) Fylking, Official Grass of Expo '74 (ns) June 42
(Turfgrass) Green is for Go (fa) Feb. 65
(Turfgrass) Groups, Officers are Named by (ns) Mar. 70
Turfgrass: The People Pleaser, GCSAA Conference and Show (cr) Apr. 20
(Turfgrass) When the Going Gets Tough by John R. Hull (fa) May 48
Turfgrass, Diseases of, by Dr. Houston E. Couch (br) Mar. 13
(Tussock Moth) Contingency Use of DDT Granted (fa) Apr. 14
(Tussock Moth) U.S. Forest Service Plans Go-Ahead for DDT (ns) May 63

Underwood, Frank A., Elected President Golf Course Builders of America (ns) Apr. 60
Upjohn Research Chemist Named Senior Scientist (ns) Aug. 31
Urban Rise, Second Home Studied by Task

WEEDS TRES and TURF
A new natural team, Glade Kentucky bluegrass and trees! Glade performs well in moderate shade, especially when mixed with fine fescues. A selection from Rutgers University (tested as P-29), Glade is an improved, low-growing, medium to dark green grass with fine leaf texture and thick, rapid-growing rhizome and root system. Glade has good resistance to important turfgrass diseases including powdery mildew.

Like boys and trees, Glade and shade go together. Mixed with other elite bluegrasses and fine fescues in moderate shade, Glade is a natural.

Get new Glade at local wholesale seed distributors.

Another fine product of Jacklin Seed Company

KENTUCKY BLUEGRASS

For More Details Circle (108) on Reply Card
AUTHORS

Abbott, Richard E., "Utility Weed Control" ....Feb. JJ

Andersen, John W., Dr., "Shade Trees for Cities, A Community Forestry Program" with Philip R. Dolberg ....May 26

Balfour, Robert L., "Golf Car Batteries, New Ratings Match Power To Use" ..........Jan. CC

Benson, Denver, "Cars' Private Guns - Club Ownership" ....Jan. DD

Brown, Max A., "Fertilization: Double Duty For Your Irrigation System" ....July 23

Carabasena, Richard J. "DED Controls Will Systems Work" ....May 16

Clark, J. K., "Infrared Aerial Photography—Easier Than You Think" with W. E. Wiedman ....Oct. 34

Clements, Donald A., "Water—Its Action in the Root Zone" ..........Nov. 30

Curtin, John J., Jr., "Bonds and Bonding" ....June 16

Daniel, Wm., "P.A.T. Takes to the Field" with R. Linton, Robt. ....Nov. 12

Dodds, D. I., "Tree Care: Helping Nature With Science" ....Jan. 14

Dolberg, Philip R., "Shade Trees for Cities, A Community Forestry Program" with John W. Andersen ....May 26

Duling, John Z., "Protection, Service and Profit" ....Sept. 12

Eckhoff, Harry C., "What's Happening in Golf Development" ....Jan. 10

Eddy, Robert, "Fewer Weeds, Better Drift Control" ....Nov. 41

Estes, D. R., "The Navy's Role in Weed Control" ....Apr. 24

Fields, Richard W., "Target: Railroad Weeds" ....Apr. 36

Fox, Donald, "The Case of the Invisible Vapor Barrier" ....Aug. 11

Frederiksen, Stan, "The Herbicide Market, Golf Courses" ....Feb. FF

Goss, Roy L., "Sod Production in the Pacific Northwest" ....June 31

Hall, John R., "Profile of an Industry" with George B. Roche ....Oct. 36

Hay, A. Pete, "Highway Weeds" ....Feb. VV

Hedlin, Daniel L., "Nine Points For Smooth Running Engines" ....Jan. FF

Heid, Henry, "Foam or Spray? Economics of Growth" ....Aug. 14

Jones, Doug, "Dawn Attack, On Hydrida" ....June 38

Kern, Dale L., "Turf Contaminants" ....Mar. 76

Korenke, Albert H., "Instant Shade Trees—Texas Style" ....Dec. 10

Lariviere, Ray, "Irrigation Pump and Engine Care" ....Jan. 22

Larson, Dr. Eric, "P.A.T. Takes to the Field" with C. R. Skogley .....June 48

Linton, Robt., "P.A.T. Takes to the Field" with Wm. Daniel & M. Robey ....Nov. 12

Loar, Stanley, "The Aborist's Insurance Market" ....Dec. 14

Locke, Richard, "Herbicides for Commercial Sod: How Do They Influence the Crop" with Dr. Robert W. Jagschitz ....Aug. 22

Mckeever, John J., "Motivating The Turned-Off Employee" ....Dec. 18

Mitchelteer, Wallace A., "Getting Acceptable Job Performance From Your Employees" ....May 34

Muirhag, Jack, "Aquatic Weeds, The Herbicide Market" ....June 29

Nicas, A. Pete, "Highway Weeds" ....Jan. HH

Poole, Charles W., "Golf Car Trouble-Shooting" ....Jan. HH

Pyron, Charles, "Forward Pass for Bermudagrass" ....Jan. 12

Robey, Melvin, "P.A.T. Takes to the Field" with Wm. Daniel and Robt. Linton ....Nov. 12

Rocholz, George B., "Profile of an Industry" with John R. Hall ....Oct. 36

Schery, Robert W., "Cool Weather Weed Control" ....Sept. 15

Skogley, C. R., "Herbicides for Commercial Sod: How Do They Influence the Crop" with John A. Jagschitz ....Feb. HH

Smith, Gerald L., "Urban Space Planning, Room for Recreation" ....July 18

Snodgrass, John L., "The Mississippi Method" ....July 11

Sturgeon, Dr. R. V., Jr., "Nematode Controls Pays" ....Apr. 18

Thomas, Dr. Johnny R., "Bent on Better Fairways" ....Jan. 58


Webster, Arnold, "Arborist in the Witness Chair" ....Oct. 16

Wender, Chet, "$20,000 Thousand In Savings Through Irrigation System" ....Feb. 4

Wesoloh, John, "Nematode Control: Wide Insurance" ....June 29

Wildman, William, "Infrared Aerial Photography—Easier Than You Think" with J. K. Clark ....Oct. 34

Wolfe, Warren D., "Creative Cure for Chlorosis" ....July 44

WEEDS TREES AND TURF
SERIES 1700 PUMP: Hypro Division, Lear Siegler, Inc., St. Paul, Minn.

New roller sprayer pump delivers up to 26 gallons per minute at pressures up to 200 PSI. It has a 15/16 inch diameter stainless steel shaft and is equipped with an adaptor for direct mounting on 540 RPM tractor PTO shafts. Pressure-tested pump housing is available in cast iron or Ni-Resist for corrosion and abrasion resistance. Leather or Viton shaft seals are available optionally in place of standard Buna-N seals. Standard rollers are teflon for most applications; nylon and rubber rollers can be substituted to fit the job. For more details, circle (702) on the reply card.


This cordless electric hedge trimmer comes complete with removable, rechargeable nickel-cadmium battery pack. Overnight charge provides one hour of cutting time. Hard, double-edged, bevel-honed steel blades, with special non-stick coating for clean cutting and resistance to corrosion, deliver 2,000 strokes per minute. 18½ inch blade is said to increase precision, high-impact plastic housing minimizes fatigue, and conveniently-placed on/off switch maximizes safety. Model 800 will be available in early 1975, priced just under $60. For more details, circle (701) on the reply card.

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

Flo-Control announces its new line of PVC In-Line Check Valves. These valves, available in sizes ¼ inch through 2 inches, are said to be economical, versatile, dependable and corrosion-free. Valve can be used for slope irrigation, swimming pools, pumps, water meters and other applications. The valve has a Scheduled 80 wall stainless steel spring with a guaranteed life of 2,000,000 cycles and a Buna "N" seal which insures suitability for use with chlorinated water, gasoline and oil. For more details, circle (703) on the reply card.

FRATE LIFT: Brouwer Turf Equipment Limited, Keswick, Ontario

Frate Lift loader/unloader is a lightweight compact unit (approx. 2,600 lbs.) capable of operating on construction sites as well as paved areas. Mast is designed to lift unit off ground for loading into specially-designed holders mounted on rear of truck without taking up cargo space. Equipped with three hydraulically-driven wheels with instant forward, reverse and sideshift, the unit is capable of lifting up to 4,000 pounds. It has a short turning radius and the front wheels can be extended individually or together to counterbalance its load. For more details, circle (704) on the reply card.
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 TREES 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 and 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, lawmaking 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 these 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.
FOR SALE


WOOD SPLITTER attachment for your backhoe converts your backhoe to a splitter in less than 10 min. Build it yourself with our blueprint. Super Wood Splitter 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 rotomatic parts, big discount! Phone 313 665-5338 or 313 994-3110.

FOR SALE — 11 gang Jacobsen mowers, 9 gang Roseman mowers, irrigation cable sprayers 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. $1,000.00. Write or call: Jim Walter, 624 Fairmont St., Latrobe, Pa. 15650. Phone 412 537-8778.


BRUSH CHIPPERS, aerial boom, hydroax'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. Vermeer Tree Care, 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. Esco, 5620 Old Sunrise Highway, Massapequa, New York 11768. 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 1500, good condition $2000.00. Phone 517 484-5780.

SEEDS

SOD QUALITY Merion Seed for discriminating growers. Fyking, Delta, Park, Newport, Nugget, Cheri, 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 Virginia-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 or call 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 your 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 summer months; service the same accounts during the winter months. A knowledge of soils, weed control, and sales 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 soils, woodland management, and care of natural ice for skating. Ability to meet visiting public, direct staff and to prepare bud budget, manage receipts and disbursements. Health insurance, pension plan, liberal benefits. Reply to P.O. Box 22, Natick, Massachusetts area totaling 1,215 acres. Phone 516 735-1200 or 716 436-1515.

GROUNDSMAN-GARDENER: Large midwest 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, arboretum, and landscaping preferred. Graded salary scale, beginning at $8500 or $9500. Liberal benefits. Reply to P.O. Box No. 342, Brookfield, Illinois 60513.

advertisers

Abbott Labs...............16-17
Adelphi Kentucky Bluegrass..34
Asplundh Tree Expert Co.,....6
Chipper Div. .............29
Bartlett Mfg. .............29
The Bunton Company.....39
Charles Machine Works, Inc.15
E. I. Du Pont de Nemours & Company, Inc. 5
G & H Products ..........33
Gordon Corp., P.B.I .......26
Clifford Hannay and Sons...44
Hercules, Inc. ..........3
Hypro, Inc. ..............25
Instant Shade Tree ........33
Jacklin Seed Co. ...9, 30, 45
Lawn Makers, Inc. .......40
Lots Pedigreed Seed Co. ........4th Cover
Manhattan Ryegrass
Growers Assn. ............7
National Mower Co. ...11
F. E. Myers & Bros. Co. ..43
Northrup King Co.
(Aquil Parad) .......12-13
Princeton Turf Equipment...25
Rain Bird Sprinkler Co.3rd cover
Ryan Lawn Equipment...20-21
Spraying Systems Co. ....41
Tee-2-Green Corp. ...2nd cover
Thompson-Hayward Corp. ...35
Vermeer Mfg. Co. .......48
Warren's Turf Nursery ...50
Willamette Seed & Grain Co. 27

MISCELLANEOUS

SEEKING OPPORTUNITY. Western states Consider employment, partnership, term purchase. 31 years old, B.S. Forestry. Experience: urban, state, federal, private. Present and past six years manager large scale Agri-Business. Write to Box 127, Weeds, Trees & Turf, 9800 Detroit Ave., Cleveland, Ohio 44102.

POSITION WANTED

REAL ESTATE

FOR SALE: established turf farm 20 miles from Boston, Mass. Phone 617 668-2927.
Mr. Sod Grower!

Business off? Sales down? Building slump causing you to slump too?

HERE IS SOMETHING TO CONSIDER! 

There are hundreds of thousands of old homes in communities with sparse thin lawns because of shade too dense for most grasses. There are also hundreds of thousands of old homes in well established communities where people want the best and have the means to purchase the best. Why not go after this lucrative market which is not affected by a building slump, high interest rates or inflation? You can do so by becoming a franchised grower of Warren’s A-20 and A-34 Kentucky Bluegrasses and other Warren grasses to be released as patents are issued.

Warren's® A-20 is rated high for over all performance and disease resistance by research organizations doing turfgrass research.

Warren's® A-34 is rated highest for shade tolerance by the same research people.

When you become a Warren Franchise or Associate Grower, you place yourself ahead of competition with better products, not available to your competition. Here is something else to consider . . . in 1974, when our competitors were reporting sales off as much as 50%, Warren’s Turf Nursery’s sales were running ahead of 1973. The reason . . . golf courses and athletic institutions all over the northern half of the U. S. A. were installing A-20 on tees, and athletic fields. Architects were writing specs for Warren grasses and owners of old lawns were ripping out old lawns and installing A-20 or A-34. All because these people wanted the finest lawn areas available. You too can enjoy this business when you become a Warren Associate Grower.

Warren proprietary grasses are now produced in 15 states and in England, Scotland and France. There are a few territories still available.

Write today for particulars about a Warren Franchise.
Look at it this way

Before selecting an automatic irrigation system, consider the viewpoint of a blade of grass. It wants to see enough water coming its way often enough to keep it healthy. How much and how often depends on such variables as growing conditions, sun and shade, height, temperature, and course contour. That’s why the happiest sight a blade of grass can see is a member of Rain Bird’s exclusive Golf Team (six full time golf irrigation experts) consulting with a Rain Bird installer and the superintendent—right on the course. It means the best irrigation plan, tailored to your course, carried out with the most reliable equipment. Ask anyone with a Rain Bird system. Ask any blade of grass.

Rain Bird
Glendora, California 91740

For more information circle number 177 on card
ANNOUNCING:

A Revolutionary New Perennial Ryegrass
That Won't Surrender Under Any Conditions

Yorktown

Turf-Type Perennial Ryegrass

Lofts Pedigreed Seed, Inc. is proud to announce a new variety of perennial ryegrass that truly lives up to its name. ...Yorktown. When tested against 15 other new and established varieties Yorktown received the highest rating for overall turf quality. And Yorktown features vastly improved mowing qualities. That's why we say — Yorktown won't surrender under any conditions. Although the new Yorktown turf type perennial ryegrass is not yet available in large enough quantities to meet everyone's needs, you'll be glad you waited for your 1975 supply. This time "America Surrenders to Yorktown!"

Lofts Pedigreed Seed, Inc.
Bound Brook, N.J. 08805 / (201) 356-8700

Lofts/New England
20 Beck Road
Arlington, Mass. 02174
Call collect (617) 648-7550

Chanderlin Seed Co.
Div. of Lofts Pedigreed Seed, Inc.
Bound Brook, N.J. 08805
Call collect (201) 356-8702

Great Western Seed Co.
P.O. Box 387
Albany, Oregon 97321
Call collect (503) 926-2636

Loft Kellogg Seed Co.
322 E. Florida St.
Milwaukee, Wis. 53201
Call collect (414) 276-0373

Also available from Lofts: Baron Kentucky Bluegrass (U.S. Dwarf Variety Plant Patent No. 3186) • Manhattan Perennial Ryegrass • Jamestown Chewsing Fescue • Kingstown Velvet Bentgrass • Exeter Colonial Bentgrass • Majestic Kentucky Bluegrass (P-84) To be marketed soon: Flarn 1 Kentucky Bluegrass • Georgetown Kentucky Bluegrass In addition, all of the following well-known varieties of certified turf seeds are available from Lofts: Fylking Kentucky Bluegrass • Pennfine Perennial Ryegrass • Merion Kentucky Bluegrass • Nugget Kentucky Bluegrass Penncross Bentgrass • Pennstar Kentucky Bluegrass • Highlight Chewsing Fescue • Koket Chewsing Fescue • Sydsport Kentucky Bluegrass

*Protection applied for under the U.S. Plant Variety Protection Act