"I had very little problem convincing the Greens Committee to back me with this type of research program of chemical control to stop Dutch Elm Disease," Davis says. "I described to them the safety advantages of having the chemical systematically moving throughout the tree in a 'closed' system. They were convinced."

Where does Davis go from here?

"We plan to continue with the research program as in the past," says Davis. "Dr. Shigo proved that what we had been doing resulted in no decay. Trees were alive and healthy."

"But," he also pointed out "any wound on a tree can be an opening for infection, so we plan to be careful about damaging trees. I have one elm that has had over 450 injections. We will be careful about where we place our feeder tubes so as not to cause undue stress on any part of the tree after many years of injection. And, of course, we plan to be top-notch policemen when it comes to sanitation."

---

For Premier Quality In a Winterseeding Blend Insist On

Winterlawn
For the Southwest

Dixie Green
For the Southeast

Either will produce an impressively dense, dark green turf that will hold its color beautifully whether close-cut or mowed at normal heights.

Check the ingredients and you'll know why. Dixie Green and Winterlawn are both a 60-40% blend of Derby turf-type ryegrass and Highlight Chewings-type red fescue. This blend gives you rapid germination, smooth spring transition and a turf of unsurpassed quality. Dixie Green and Winterlawn have been tested, tried and proven. Their strongest supporters are Superintendents who have tried the blend.

Derby is the ryegrass that joined Pennfine and Manhattan on the "preferred list" and Highlight was judged World Champion at the 45th Annual Royal Agricultural Winter Fair in Toronto.

For More Information Write:

International Seeds, Inc.
Dept. D • P.O. Box 168 • Halsey, Oregon 97348
Telephone: A/C 503 369-2251

Circle 136 on free information card
Ramsey launches seed mix dept.

A new Chemical and Turfgrass Division has been formed by Ramsey Seed, Inc., Manteca, CA, to provide individualized turf seed mixtures and chemical alga and weed control for golf courses, parks, and other landscape projects.

The new division will be headed by Larry Evans, who has directed chemical products sales for Ramsey for the past four years.

Ramsey Seed, a division of Celanese Corporation, is one of California's major processors and wholesale distributors of a broad line of grass and clover seeds for landscape and agricultural planting.

Its products include such widely used landscape seed varieties as Blando Brome, Annual Clovers, Lana Vetch, and Turfgrass. The new division will provide seed mixes of these and other varieties to individual specifications.

Forestry gift is "moon tree"

Secretary of Agriculture Earl L. Butz recently received a "moon tree" seedling during ceremonies in honor of the 100th birthday of federal forestry in the United States.

The tree, a 2-foot Loblolly pine grown by the Forest Service from seeds carried to the moon and back aboard Apollo 14 in 1971, was presented by Forest Service Chief John R. McGuire and Astronaut Rusty Schweickart of the National Air and Space Administration.

New green aphid eats Ohio turf

Many lawns in the Midwest are being attacked by a new lawn pest, identified as Schizaphis graminum (Rondani) or the green bug aphid. This is not the same aphid that attacks trees and shrubs.

Aphid damage on lawns in Ohio was reported as early as 1973, but cases were infrequent. In 1975 aphid damage was relatively common and there have been numerous reports so far in 1976, especially in the Columbus and Dayton areas.

The green bug aphid will feed both in shaded areas and in direct sunlight. The insect injects toxic substances into the grass blade and sucks out plant fluids. Populations of 20 or more per grass blade are not uncommon.

Damage first appears as an underfertilized or underwatered area turning to a distinctive brownish-orange cast. If left unchecked, large areas can turn totally brown and die.

Continued on page 44
**How to make your board see the value of new turf equipment.**

Convincing your Board of Directors that new turf equipment is a necessary and sound investment can be one of your most difficult tasks. They don’t always see the benefits behind such a purchase.

And as good businessmen, they won’t commit the money until they’re sold on the expenditure. So when it comes time to face them, here are some of the things you should point out.

**Point #1:**
**The Duffer Demands More.**

Today’s golfer is more sophisticated than ever before. He has seen, and many times played, some of the finest courses in the world. He recognizes the value of a good course. And if yours is sub-par, he’ll go elsewhere.

With this more sophisticated golfer comes the need for more sophisticated golf course maintenance. Heavy player traffic has increased the work required to keep the turf in top condition. So jobs that were once optional are now mandatory. Where spiking a green used to be sufficient, today it also needs deep aeration.

All this dictates the use of specialized equipment that wasn’t available ten or even five years ago. Equipment that will enable you to build and maintain a top flight course, and help avoid special turf problems that could prove extremely costly.

**Point #2:**
**Machines Do More.**

In the past decade, the price of labor has tripled. The same number of men must do more work in less time to give you the same value for each labor dollar invested. Mechanized equipment allows you to trim hundreds of unnecessary man-hours. One man can now cut more sod in an hour than six men used to cut in six hours. Or that same man can aerate 18 greens in a few hours instead of a few days.

New engineering concepts coupled with precision machinery means he’ll do a consistently good job. You get better results and fewer occasions when a job must be redone.

And your turf equipment is depreciable; something your labor is not. You get an accounting break over a period of years. At the end, it’s like owning a piece of free machinery. One that will continue to save you money long after you’ve paid for it.

Which brings us to the third point.

**Point #3:**
**Longevity Makes Them Worth More.**

Equipment life should be a prime consideration when you select a manufacturer. The longer a machine works, the more it does, and the less maintenance it requires, the better your investment. And here’s where we’d like to put in a little plug for Cushman and Ryan turf equipment.

Both lines of machinery are built to last... and last. It’s not unusual to see a piece of Cushman or Ryan equipment still doing its daily chores after ten or fifteen years of use. We believe the idea of “planned obsolescence” should be obsolete.

But performance is just as important as longevity. A Cushman Turf-Truckster and its accessories give you the capabilities to transport, spray, spike, dump, aerate, and top dress... all from one power source.

Ryan offers a machine for almost every turf task. Equipment that does a better job, in less time, and with a minimum of maintenance. For over 30 years, all Ryan equipment has been built with three goals in mind: quality, performance, and innovation.

If “A Day With the Board” is in your future, we’d like the opportunity to tell you more about the full line of Cushman and Ryan Turf equipment. Write to us and we’ll send you our catalogs, full of detailed product information. Information that may help you open a few eyes to the value of new turf equipment.

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OMC—Lincoln, a Division of Outboard Marine Corporation, 7706 Cushman Drive, P.O. Box 82409, Lincoln, NE 68501
Continued from page 42

At present there are no labeled insecticides for aphids on turf. Materials labeled for aphids on trees, such as Diazinon and Malathion, will control them.

Fungus studied

Under a $20,000 research grant from the U.S. Department of Agriculture (USDA), scientists at the Agricultural Experiment Station of the University of Arkansas will study the effect of Colletrotrichium gloesporioides on animals, fish, birds, and grain. The fungus has been used as a weedkiller against northern jointvetch in Arkansas rice fields for the past four years.

The university researchers will try to determine whether the fungus causes disease or is poisonous when administered by various methods to rats, fish, and birds. Its effects on the eyes and skin of rabbits and guinea pigs will be studied. It will also be grown on grain to determine whether mycotoxins or mold poisons develop.

Results of the research will be used in applying for registration of the fungus as a weedkiller with the Environmental Protection Agency.

Cal. bans burial of defoliant

California officials have refused to permit a Texas company to bury surplus poisonous defoliant of the type that contaminated the Italian city of Seveso last summer.

Dr. Jerome Lackner, director of the California Department of Health, said that the Agent Chemical Company of Houston had requested permission to store 800,000 gallons of tetrachlorodibenzodioxine in sealed steel containers 100 feet underground at a storage facility in West Covina.

A department spokesman said there were too many unanswered questions about the burial of the defoliant, which was used in Vietnam. “We have no proof that the packing is going to last,” he added.

A spokesman for the Ben K. Kazarian Company, where the chemicals were to be stored, said that the Federal government classified the substance as “extremely hazardous.” Tests were being conducted by the Kazarian Company to determine the safety of the canisters.

EPA OKs Sevin 4 Oil carbaryl

Sevin 4 Oil carbaryl insecticide has received federal registration from the Environmental Protection Agency for control of the Western spruce budworm, Union Carbide Corporation, the manufacturer, has announced. The compound was tested extensively in Montana, Washington, Maine, Minnesota, and Canada.

Registration covers aerial application at the rate of 1 quart per acre on the third to fifth instar larvae in the Rocky Mountains and west of the Rockies.

EPA also approved ground application of diluted Sevin 4 Oil through mistblowers for foliage protection of high value trees against both the spruce budworm and western spruce budworm. The recommended rate per 20- to 30-foot tree is 0.2 pint of spray in a 1-to-1
"I like to send trees into winter in good, healthy condition. That's why I feed in the fall with Jobe's Spikes."

"Last winter, we had three weeks when the temperature was never above 10 degrees. Weather like that is rough on trees, so I believe in sending them into winter in the best possible condition. We use Jobe's Spikes on everything in the fall... willows, evergreens, maples, all our trees and shrubs."

Jobe's makes good fall or winter fill-in work.

When work slackens off, it's time to get busy with Jobe's® Tree and Shrub Spikes. It helps eliminate one chore from the busy spring-summer months, and it's good for the trees.

Roots grow in the fall, so feed them in the fall.

Feeding with Jobe's Spikes in the fall while roots are growing helps overcome weakness brought on by summer heat, lack of moisture and ravages of insects. Helps trees get through winter in shape for a strong start in the spring. Just pound Jobe's Spikes into moist ground at the dripline at the rate of 1 per inch of trunk diameter.

Frank Lamphier says, "Jobe's Spikes are long lasting. When we use them in the fall, the trees get nourishment for the winter. Then, when spring rains start, the balance of the fertilizer is released to shoot them off for spring. We think one Spike does more good than one to two pounds of ordinary fertilizer."

"Jobe's Spikes work!"

"We started 12-inch pine seedlings 4 years ago, and now they're 6 to 8 feet tall. We fed them at transplanting with Jobe's Spikes and have fed them ever since with Jobe's. Growth like that really sold me. University leaching studies have shown that Jobe's Spikes are as effective as drilled fertilizer. Rainwater carries nutrients from the Spike to the root zone to a depth of at least 24 inches. Jobe's Spikes are better than surface-applied fertilizer. You don't worry about run-off losses or about burning turf or causing excessive turf growth around trees."

"You can just tap them in with a hammer in moist ground."

A hammer is all the equipment you need with Jobe's Spikes. No bulky auger to carry from job to job. Nothing to break. No maintenance costs. No fertilizer bags to tear or spill.

Jobe's Spikes are a pre-measured amount of 16-8-8 fertilizer formed into a rigid, easy-to-drive spike.

"Jobe's Spikes don't take much space, or time."

"I can send a man out on a 3-wheel cart with enough Spikes to last all day. Working fast is important because I have just 7 men, and only 4 year-round. We're working on a major landscape program with trees and shrubs to improve the looks of the course. Jobe's Spikes really save us time."

Jobe's Evergreen Spikes 12-6-8 and Fruit Tree Spikes 5-15-15 are now available in bulk packs. They can be combined for shipping with Tree and Shrub Spikes.

Call your local Jobe's distributor or order direct. $30 per case (105 Spikes) prepaid, 5 case minimum. 15 or more cases, $25 per case.
USED EQUIPMENT


MODEL 2100 ARLO 100 foot telescoping crane, unit power by Miller generator, electric start, 2 pair manual operated outriggers mounted on 1965 model 1700 I.H.C. truck with flat bed, $8,900.00 F.O.B. Des Moines, Iowa. Wright Tree Service, 139 6th St., West Des Moines, Iowa 50265. Phone 515 277-6291.

SEVERAL 50 FOOT SERVI-lifts mounted on GMC trucks. Call 410 725-2250.


JIFFY DIGGER, with untercutter, 3 point hitch, excellent condition. 3 buckets 8" 12" 16", $795.00. Little Tree Nursery, R1, Leesport, Pa. 19533. Phone 215 926-2312.

ROSEMAN MOWER 7 gang $1550; 9 gang, $2,000. Ryan sod cutter with roll Ryder attachment $1550. Phone 414 484-3941.


SEEDS


ST. AUGUSTINE GRASS SEED — available for first time. Germination exceeds 75%. 2 oz. sample $6.00 post paid Air Mail in U.S. Check with order, no C.O.D. Curran L. Garrett, Box 337, Ingleside, Texas 78362.

HELP WANTED

YEAR ROUND WORK A.A.A. Tree Service, Inc. of Florida. Looking for experienced top notch climbers with or without truck and equipment to work by the hour, on percentage or under Franchise in Florida areas. Also needed older men with sales ability. Mechanic with chain saw experience. Man to operate his own tree spade. Henry Hardy, Jr., P.O. Box 6173, Orlando, Fla. 32803. Phone 305 339-5242.

TURF FARM, GENERAL MANAGER — Growing firm needs hard-working Branch Worker, with a minimum of 5 years practical experience in sod farm production. Technical knowledge and knowledge of production and harvesting equipment a must. Must be able to effectively manage people. Salary, negotiable according to qualifications. Inquiries will be held in strict confidence. Please send your complete resume to: Box 155, Weeds Trees & Turf, Box 6951, Cleveland, Ohio 44101.

WANTED EXPERIENCED tree climbers with climbing gear and transportation to work in New Orleans, Louisiana for large established tree service, $250.00 a week round work. Drunks and drifters need not apply, must be experienced in all phases of tree work. Environmental Services, 3781 Dixon St., Metairie, Louisiana 70001. Phone 504 837-2314 or write C. J. Graffagnini, Environmental Services, Inc., 3781 Dixon St., Metairie, Louisiana 70001.

FOR SALE

WANTED — Bean Royal 55 pumps and Bean 20057 Ballinger Rd., N.E., Seattle, Washington 98122.

South Dakota sod farm. 172 acres, irrigated, near Rapid City, all equipment included. Call Rich Neal at Am Prop Real Estate, 605 343-0398 or evenings 348-7595.

FOR SALE Tree Service Co. doing good business for utilities. 1975 Cadillac estimator car. All two-way equipment. New owners will net $80,000.00 plus. Call 504 837-2314 or write C. J. Graffagnini, Environmental Services, Inc., 3781 Dixon St., Metairie, Louisiana 70001.

WOOD SPLITTER attachment for your backhoe converts your backhoe to a splitter in less than 10 min. Build it yourself with our blueprints. Send $27.30. Lupton Enterprises, 32 Martha St., Tiffin, Ohio 44883.

SOUTH DAKOTA SOD FARM. 172 acres, irrigated, near Rapid City, all equipment included. Call Rich Neal at Am Prop Real Estate, 605 343-0398 or evenings 348-7595.

WANTED EXPERIENCED tree climbers with climbing gear and transportation to work in New Orleans, Louisiana for large established tree service, $250.00 a week round work. Drunks and drifters need not apply, must be experienced in all phases of tree work. Environmental Services, 3781 Dixon St., Metairie, Louisiana 70001. Phone 504 837-2314 no collect calls.

LAWN SPRINKLER FOREMAN WANTED: Must have 3 to 5 years experience in commercial and residential installations, steady work record, need a leader who can handle men, job may entail a demanding work schedule with some travel, salary open depending upon experience and qualifications, company benefits. Send resume to Landscape Design and Construction, 2559 Southwell, Dallas, Texas 75229, c/o Michael Hernandez.

HIBERNating and the NEWBORN March of Dimes

This space contributed by the publisher

Circle 129 on free information card 46 WEEDS TREES & TURF/OCTOBER 1976
HITCH UP

TILTSTER the low bed trailer that tilts to ground level for easy 'roll aboard' loading.

An easy, one-man operation, Tiltster transports loads up to 5,000 lbs. anywhere you want them to go. Just a simple turn of the jack handle and the trailer body tilts downward for easy 'roll-aboard' loading. Bed automatically returns to hauling position when loading is completed. Tapered, self-adjusting tailgate ramp provides smooth, gradual incline for fast, safe loading. Three models; 2,000 lbs. to 5,000 lbs. capacity.

TRAILEVATOR Hydraulically lifts its own load in seconds

Trailevator lowers to ground level for fast, 'roll aboard' loading then lifts its own load to hauling position in seconds. Lowers and lifts without uncoupling from towing vehicle. Four models, two capacities: 3,000 lbs. and 2,000 lbs. Bed sizes up to 5'-10" x 10'.

NORTHLAND utility trailers

Strong, durable, all-purpose utility trailer with unitized steel bed construction. Body tilts to ground level for fast, easy loading. Steel side racks and end gate with positive locking latch available. Three models; capacities to 2000 lbs.; bed sizes to 6' x 8'.

Magliner Inc., Pinconning, Michigan 48650
P.O. Box 2610 Tel.: (517) 879-2411

Single Axle Tiltster
Capacities to 3000 lbs.
Circle No. 145

Low Profile Utility Trailer
Capacities to 1500 lbs.
Circle No. 146

Flat Bed Utility Trailer
Two bed sizes, 1,000 lbs. cap.
Circle No. 147

Flat Bed Tandem Axle
Capacities to 2500 lbs.
Circle No. 148
Air brooms come in two versions—with wheels or with shoulder straps. Wheels look comfy and modern, all right. But for blowing leaves out of flower beds, rock gardens or from under shrubs, for cleaning staircases, roofs, seat rows in arenas and convention centers, up ladders or down ships' holds, in trucks and rolling stock, or for blowing snow off a car dealer's merchandise on a cold Saturday morning—Solo's ultra-mobile light-weight knapsack blowers have no wheel-ed competition. The Solo's go where wheels don't. We offer two models, of 3 hp/35 cc. and 5 hp/70 cc., with special dust filters, comfort-ably padded adjustable shoulder straps and with a history of well-nigh 1,000,000 sales to back them up.

Solo supplies a wide line of blowers, sprayers, chain saws, tillers and other outdoor pow-er products. We would like to tell you about our full line. Please give us a call.

Box 5030, Newport News VA 23605 — (804) 245-4228
Box 464, Burlington, Ontario L7R 3Y3

Circle 133 on free information card

Industry News

Continued from page 44

by-volume mix of Sevin 4 Oil plus diesel fuel or kerosene.

Sevin 4 Oil is now registered for spruce budworm control for all areas east of the Rocky Mountains as well; its spruce budworm regi-stration was previously limited to northeastern states only. Other forest insects for which Sevin 4 Oil is registered are the gypsy moth, cankerworm, saddled prominent, forest tent caterpillar, oak leafroller complex, and Japanese beetle.

Toro plans sale of Game-Time, Inc.

The Toro Company has announced an agreement in principle with a pri-vate group of investors for the sale of Game Time, Inc., manufacturer of outdoor institutional playground equipment and wholly-owned Toro subsidiary since July, 1972. The sale will be concluded in late October.

"While Game Time contributes approximately 10 percent to our overall sales and earnings, we feel that the funds involved can better serve our shareholders' and the company's own long-term interests in areas more closely allied to Toro's basic businesses," explained Toro's president David T. McLaughlin.

Toro is committing greater re-sources to the domestic and inter-national markets for turf and agricultural irrigation equipment, riding mowers, tillers, and snow-throwers. The company will be in-troducing new products in each of these areas during the current fiscal year.

Game Time pioneered the con-cept of mobile recreation units in the leisure services field, and was among the first to introduce a line of ther-a-peutic play equipment for children with disabilities.

McLaughlin said the sale is sub-ject to several conditions, including approval by the boards of directors of both Toro and Game Time, as well as to final approval by the prospective purchasers, whom he did not identify.
Let's talk about bad service.

Let's say you've gone to all the trouble of carefully selecting the turf care equipment you've been looking for.

You've worked hard to find it, and get it at the best price you can, and delivered as quickly as possible. Only to start using it and then discover you can't get good service on it. It's like you went to all that trouble for nothing.

We know you don't like bad service. And we don't either. That's why every Jacobsen distributor goes out of his way to be second to nobody in service. The reason is really simple. We're independent businessmen whose success or failure depends upon our reputation. So we jealously guard it.

We do this by offering you the finest and most complete line of turf care equipment we can find. It's made by Jacobsen. Whatever you need, we probably have it. Then we back it up with service matched by none. We have parts in stock. Our mechanics are Jacobsen-trained to know the equipment inside and out. And we can help you train your people in equipment maintenance through Jacobsen's school, or field training program.

Besides that, we can probably help you arrange a financing or leasing program to suit your needs. And we can probably help you do a cost analysis of your turf care chores to determine which equipment will do the fastest job at least cost.

So the next time you need turf care equipment, talk to your Jacobsen distributor. He has the right product. If you want good service, he has that, too.

And that's not bad. Not bad at all.

Your Jacobsen Distributors
Great products deserve great service.

For the name of the distributor near you write: Jacobsen Turf Distributor Directory, 1721 Packard Avenue, Racine, Wisconsin 53403