in vogue since the 1940's, but is now being buffeted by environmentalists complaining of the smoke in the summer sky.

The 1970 legislature passed a bill calling for an end of open field burning by January 1975, making the summer of 1974 the last season for open field burning. At the same time, the state began a program of matching funds with growers for research into a smoke-free type of mobile burner which would sanitize the fields without the accompanying smoke. The engineering problems associated with constructing such a burner have so far been unsolvable.

The council says a "no burn" ban would cut the crop yields considerably in 1976, but not until then. And they feel the legislature will grant, at least, a two year extension to perfect the burning machines and improve techniques of straw handling and usage.

The high price of wheat may well affect the production of annual grass, but it is doubtful if there will be much change in the acreage of perennial grass crops. Higher prices for annual ryegrass during the past year will encourage production of that crop. Lower prices for annual ryegrass would encourage grain production.

According to the release, if the legislature were so short sighted and fail to grant an extension to open field burning, crop yields would decimate beginning in 1976. New cultural techniques could be applied to keep grass seed production going, but the change would be expensive to growers and would no doubt be reflected in the cost of grass seed.

Shorter life stands of perennial grasses, burning every other year, and heavy uses of chemicals would be some of the alternatives to field burning. None of the alternatives would be as efficient as the field sanitizing now being used.

Irrigation Specialists
Open Office in Westwood

New England golf course superintendents, contractors and architects may benefit from a new move by White Turf Engineering, Inc.

The firm recently opened a sales and distribution center in Westwood Industrial Park, Westwood, Mass. From the new 1,960 square foot location, White hopes to supply a variety of irrigation components to its Eastern Seaboard customers.

Pre-packaged Parts Display
For Non-service Toro Dealers

After a successful test in six states, the Toro Co. has extended a new method for merchandising parts and accessories for powered lawn mowers, free-standing displays of parts and (continued on page 53)

---

Get a real bargain on a landscape rake.

Cut this one out.

Buying a rake and getting a real bargain are two different things. The initial cost isn't nearly as important as how much money it's going to save you in the long run. And how many things you can do with it.

We make two kinds of rakes. The Little Rhino and the Lone Star. Both are 8 feet wide. And both have heavy duty frames, easily replaceable high-carbon, heat-treated spring steel tines, optional leveling gauge caster wheels with wide pneumatic terra tires, and everything it takes to handle just about any job you've got.

In addition, the Little Rhino has an exclusive offset feature that lets you work close to buildings, fences or any other obstacles.

But the best thing about both rakes is that they can be quickly converted for blade work. The rake frames are the same as we use on our standard blades.

All things considered, a SERVIS landscape rake is as useful and productive as any implement you own.

SERVIS

AUSTIN PRODUCTS, INC./Box 1590/Dallas, Texas 75221

Name

Address

City State Zip

Student?

*Formerly Servis Equipment Company

For More Details Circle (139) on Reply Card

MAY 1974
Put yourself in the firewood business with the LS-200 Log Splitter from Vermeer. It's dependable... economical... an ideal unit for parks, campgrounds and the outdoor recreation industry. A great money-maker for tree firms, nurseries and rental operators. Hydraulically splits big 30" logs into firewood in seconds. Single control lever activates its powerful, vertical cylinder. Easy to transport from one site to the next. Interested? Write —

VERMEER TREE EQUIPMENT DIVISION
0000 NEW SHARON RD. • PELLA, IOWA 50219

meeting dates

Arizona Turfgrass Conference, Sheraton-Pueblo Inn, Tucson, Arizona, May 1 and 2.

California Fertilizer Conference, Anaheim, Calif. May 2 and 3.

Western Chapter, International Shade Tree Conference, annual meeting, Del Monte Hyatt House, Monterey, Calif. May 19-22.


American Society of Landscape Architects, 74th annual meeting, Americana Hotel, Bal Harbour, Miami Beach, Fla., June 30-July 4

American Association of Nurserymen, annual convention, Four Seasons-Sheraton Hotel, Toronto, Ont., July 13-17.


American Society for Horticultural Science, 71st annual meeting, and Canadian Society for Horticultural Science, 19th annual meeting, University of Guelph, Ontario, Aug. 11-17.

International Shade Tree Conference, Golden Anniversary meeting, Atlanta, Ga., Aug. 18-23.


Professional Grounds Maintenance Society Conference, annual meeting, Crown Center Hotel, Kansas City, Mo., Sept. 4-6.

International Plant Propagators' Society, Western Region, 15th annual meeting, Mission Bay area, San Diego, Calif., Sept. 4-6.

Florida Turf-Grass Association, combined conference and show, Curtis Hixson Convention Center and Riverside Hilton, Tampa, Fla., Sept. 16-19.


Southwest Turfgrass Conference, New Mexico State University, Las Cruces, N. Mex., Oct. 10 and 11.


Central Plains Turfgrass Conference, K-State Union, Kansas State University, Manhattan, Kan., Oct 23-25.

Oregon Weed Conference, 23rd annual meeting, Indian Hills Motor Inn, Pendleton, Ore., Oct. 23 and 24.
Parts
(from page 51)

accessories in pegboard-mounted blister packages.

Richard J. Hargarten, general manager of Toro's parts division, reported that more than 2,500 dealers have already ordered the "Self-Service Merchandiser" kits.

The initial production calls for packaging 250,000 parts and accessories and the total is expected to exceed a half-million during the year.

The new merchandising concept was tested by 250 dealers last summer and fall. Then the display stand was re-styled and the final selection of parts and accessories for the merchandiser was based on the results of the test.

Hargarten said the self-service merchandiser was designed primarily for non-service dealers, who do not stock parts and accessories. Most of these are hardware stores where high-visibility rapid turn-over and built-in inventory requisites.

Each display stand is stocked with a total of 58 packages of 18 different parts and accessories. These include blades, throttle cables, traction control cables, gas caps, battery chargers, mufflers, anti-scalp discs, drive belts for self-propelled machines, and tire kits.

All can be installed simply, without special tools. And each item is packaged with a set of step-by-step instructions, including illustrations.

Each package is identified by descriptive, automotive-style labels, as well as by parts numbers, to facilitate self-service.

The self-service merchandisers will have advantages for consumers as well as dealers. The appearance and high visibility of the display stands will encourage owners of Toro mowers to make minor repairs before they become serious. "They'll save money and avoid the inconvenience of having to wait if a break-down occurs when their service dealer is at his busiest," Hargarten said.

Replacement blades were among the most popular items during the test program.

Florida Turf-Grass Assoc.
Changes Meeting Format

The Florida Turf-Grass Association voted to change their meeting format at their annual business meeting recently. For several years there has been two meetings per year - a trade show in the Spring and a management conference in the Fall. Now there will be just one conference and show scheduled for the Fall.

The first combined conference and show is slated for September 16-19, 1974, at Curtis Hixon Convention Center and Riverside Hilton, Tampa, Fla.

Malathion Plus Oil Spray
Removes Citrus Sooty Mold

The black sooty-like covering on ornamental plants and citrus frequently confuses the homeowner. This black covering does not in any way seriously injure the plant. Yet, some sunlight may be cut out from penetrating the leaf. The primary cause of black sooty mold is not the one that harms the plants. The black covering can be caused by one of three or four insects — aphids, certain types of scale, and whitefly. At this time of year, aphids are probably the culprit.

The insects named have a sucking mouth part. They feed rapidly and excrete rapidly. Excretion form the bodies of these insects is high in sugar and when dropped on a leaf appears to be sticky. The black covering, which is sooty mold, is present in the air most of the time. It feeds on the sweet excrement of these insects. As it multiplies it forms a layer.

In order to control sooty mold you must control the insect that is excreting the sweet, sticky substance. A spray of Malathion applied according to directions for the ornamental or citrus affected will control the problem. To remove the sooty mold from the leaf, a light application of an oil spray will suffice. Oil should not be used more frequently than at 30 day intervals. Temperature should not range below 45 nor above 85 degrees Fahrenheit.

One of the best ways of making your money go further is to have your soil analyzed. When the results are interpreted, you may find that you need only one or two of the basic elements required by the plant. The application of all three elements in the form of a 6-6-6 or 8-8-8 could be unnecessary. Many nursery and garden supply stores will determine through soil analysis the elements needed. If they are not equipped to perform soil analyses your local County Agent can help you.

It is more advisable, says Florida Nurseymen and Growers Association (FNAGA), to fertilize lightly, frequently, or to use a slow release fertilizer designed to feed the plants over a long period of time.

COMING IN JUNE
WTT AQUATIC
WEED CONTROL

Why let algae and water weeds limit your pond use?

THIS DOESN'T BELONG!

OPEN THE WAY TO A PROPER WEED-FREE POND ENVIRONMENT WITH

HYDROTOL 47

Without proper control, waterweeds and algae can:
1. Restrict or clog irrigation equipment.
2. Reduce water holding capacity of the pond.
3. Create an imbalance in fish population.
4. Limit swimming enjoyment.
5. Tangle fishing lines.

Hydrotol 47 controls many weed and algae. It provides the proper balance to assure maximum use of this important resource. It helps reduce maintenance, lowers operating costs, increases efficiency and improves the aesthetic value of the pond.

Hydrotol 47 is easy to apply. It is effective, fast acting and bladegradable. It does not accumulate in fish or build up in water or on lake bottoms. It controls most algae, including Chara.

Specify Hydrotol 47 from your farm supplier, or, for more information, write: *For the protection of swimmers and wildlife read the label.

PENNWALT AGCHEM-DECCO DIVISION
1713 SOUTH CALIFORNIA AVENUE
MONROVIA, CA 91016 (213) 358-1838
Pennwalt is an equal opportunity employer.
The life and health of trees too often has been delegated to the whims of nature. Even with the many technological advances at our disposal, authorities agree that our most precious landscaping resource has long been neglected.

When the name of this publication was changed to WEEDS, TREES & TURF, one of the reasons was to put more emphasis on trees and their needs. Fortunately, we were right. Today trees are beginning to receive the recognition they deserve.

Though arborists say fertilization is important for strong, healthy trees, most methods used are inconvenient and time-consuming. Deep holes pounded or drilled around a tree and filled with fertilizer takes a long time and often is expensive. Broadcasting extra fertilizer on the soil surface can also present problems. Accelerated turf growth or “fertilizer burn” may result, as well as pollution run-off from heavy surface applications. Perhaps these methods have been the stumbling blocks to good tree care.

But now a new technique has been developed for fast, easy tree fertilization. It’s the first advancement in tree fertilization in over 50 years, say some authorities. The innovation is a new tree food spike. Fertilizer is compacted under a patented process into a spike that guarantees a 16-8-8 analysis. Tree food spikes include a removable rubber cap to facilitate hammering them into the ground. Soil moisture does the rest.

This new method of fertilizing trees is Jobe’s Tree Food Spikes. It took seven years to develop spikes into a marketable product, say the owners, Labe Jackson and Joe Owens, of Lexington, Kentucky. The name Jobe’s was derived from a combination of their first names... Joe and Labe.

These two young men’s families have been in allied agricultural businesses for many years. After three years of working with spikes on a small scale, Labe Jackson joined with Joe Owens and his family to produce the spikes efficiently in large quantities. That feat was accomplished in 1972.

As early as 1970, to verify their findings the two young men took their spikes to Purdue University’s Agricultural Experiment Station. Purdue were especially interested in the spikes, for they were seeking fast and low-cost methods for fertilizing trees along the nation’s vast Interstate Highway system.

Dr. Philip L. Carpenter and Dr. Robert E. McNeil of the Department of Horticulture at Purdue tested the new spikes and reported that not only were they more efficient, but that tree food spikes could be inserted in the proper location nearly three times faster than conventional methods of fertilizing trees. In addition, the Purdue report concluded that the use of Jobe’s Spikes for tree fertilization eliminated major problems encountered with previous fertilizing techniques. Today, trees along the Interstate system are a prime market for Jobe’s.

For an early spring boost, Jobe’s Spikes supply trees with a hearty reservoir of plant food, revitalizing them after a hard winter. Tests indicate that leaves grow faster. Fruit-producing trees that have been fertilized are also healthier and better withstand insect attacks. Spring is an ideal time to use spikes because the ground is moist. Since spikes last a year, they help develop root systems in the fall. This helps trees survive dry winds, rain, sleet, freeze and thaws of winter.

Jobe’s Tree Food Spikes are currently being used in such well known places as Bellengrath Gardens, Biloxi, Mississippi; Colonial Williamsburg; the Ridgelea Country Club, Ft. Worth, Texas; Wright—Patterson Air Force Base, Dayton, Ohio and the Veterans Hospital in Lexington, Ky.

Jobe’s Tree Food Spikes are manufactured by International Spike, Inc., 462 East High Street, Lexington, Kentucky. Jackson is president of the firm and Owens secretary-treasurer.
THOMAS R. LOY, appointed project manager for the corporate development section of Velsicol Chemical Corp. and MARVIN R. FANNIN, promoted to plant manager at Velsicol production facility in Beaumont, Texas.

Elanco Products Co. has promoted three men to district sales manager positions for their agichemical products: WILLIAM H. CULPEPPER, JR., JIM E. MEEKER and DAVID E. SMITH.

JOHN T. SINGLETON, appointed to director of national institutional sales for the Toro Co.; JAMES W. ROBINSON and JOHN KING join Toro as district sales managers.

ROD L. WOODWORTH, promoted to manager of engineering for the Municipal and Industrial Service Equipment Division of FMC Corp. The Engineering Department of FMC was increased with the creation of two new positions: LANCE O. PERSANLL named advance design manager and MERLE EDWARDS as project engineer.

JIM HOUSTON, joins Proturf as a technical representative in the London/Windsor area; DENNIS KASPER, promoted to technical rep. from Scotts' retail division and BOB WRIGHT, appointed to manager of international market development.

JAMES DONOHUE, named district sales manager for Lawn-Boy in Missouri and five neighboring states.

GRANT HANSON, appointed to district manager for Rain Bird Corp. He will handle both agricultural and turf irrigation sales for Idaho, Montana, Wyoming, Nevada, Utah and Colorado.

RICH BALDWIN, named regional manager for the northeastern sales territory for Badger Dynamics Inc.

F. G. SCOTT, named senior vice president of Case and general manager of the construction equipment division. Scott has been executive president of Walker Manufacturing Co.

WILLIAM S. HOWARD, joins Heston Corp., as general manager of their new lawn equipment division in Indianapolis, Ind., N. VINCE HEMINGSON, was promoted to sales manager for the new division and LYLE E. YOST, president of Heston, has been named Kansan of the Year.

V. HUBERT BROGDON, JR., promoted to vice president of Freeport Sulphur Co. Brogdon is also assistant vice president of the parent company.

HENRY B. EVERHEART, appointed as Southwest Regional Manager for Turf-Vac Corp, as part of the company's current drive to provide more field assistance to its distributors in North America.

ROBERT P. BARNETT, elected executive vice president of ICI America Inc., by its board of directors. Barnett will be responsible for some 1500 employees.

MARY RICHARD VESTER, joins the public relations staff of Ciba-Geigy Corp., Agricultural Division. She will edit the monthly publication, BROADCAST, coordinate employee and community relations programs and handle assignments in general news writing and placement.

NEW!


More than 9,000 turf men—professionals, students and laymen—on four continents already know the value of the Guide to Grasses for quickly identifying monocots. This new guide will be just as valuable in the field of dicots.

Like the Guide to Grasses, the Guide to Dicots is designed to be taken into the field. It’s printed on wear-and-tear-resistant paper with a durable leatherlike cover. It fits easily into a shirt or jacket pocket. And because the guide is ring-bound, it will lie flat, allowing easy examination and comparison in the field. You can keep it handy to quickly identify any of 100 varieties of dicots you may come across... the guide has them each illustrated and cross-referenced by name and geographic location.

Order your copies of the ProTurf Guide to the Identification of Dicot Turf Weeds now. (And if you haven’t yet bought a copy of the Guide to Grasses, now’s your chance to buy a complete turf field-library!)

Please send me ______ copies of the ProTurf Guide to the Identification of Dicot Turf Weeds, at $4.50 each.

And please send me ______ copies of the ProTurf Guide to the Identification of Grasses, at $4.50 each.

I enclose my check for $

NAME
ORGANIZATION
ADDRESS
CITY STATE ZIP

PROTURF
GUIDE TO THE IDENTIFICATION OF DICOT TURF WEEDS

ProTurf

Send to: Jim Converse, ProTurf Division
O.M. Scott & Sons, Marysville, Ohio 43040
Sweet Sounds
(from page 47)

Sound level meters cost several hundred dollars, and you probably won’t want to buy one, so your best bet is to borrow one or employ a specialty service to make the measurement for you. But first check your insurance carrier — they may be able to do the work for you — free.

Let’s assume that you do have a problem. You have a four man crew working with a machine that, when new, produced 100 dBA but now, because of a bad exhaust system and some worn gears, produces 110 dBA. One man runs the machine about 4 hours a day, so you give him some hearing protection and he uses it faithfully.

Are you in compliance? No, you are not!
Read paragraph (b) (1) in 1910.95 again. It says that when your employees are subjected to sound levels exceeding those in Table G-16, feasible administrative or engineering controls shall be utilized. That means that you must first do all you can to quiet the machine. In this case, a new exhaust system and engine overhaul would reduce the sound level to 100 dBA. A compliance officer would require you to do the work, and give you a limited time to do it. So you pay the price to have the work done. Hopefully you’ll find you’re still not in compliance.

Note Table G-16 — daily allowable exposure to 100 dBA is two hours, but your man is getting four. You’d be expected to handle this administratively, by splitting the work between two men. This way, each man would be exposed to 100 dBA for only two hours a day, which is acceptable. If you could show administrative controls were not feasible, because the machine operator was the only man qualified for the job, then you would comply by using hearing protection.

Compliance with 1910.95 may seem to be a lot of trouble, and even unnecessary, to some. Realistically, it isn’t. Excessive noise has been demonstrated to be injurious to our hearing. It’s also annoying and can actually produce fatigue. Talk to any man who has been wearing hearing protection in a noisy environment he’d previously worked in without it. Invariably, they think it’s great and will tell you that they feel better and more relaxed during the day, and less tired at the end of the day. Clearly, noise control is to everyone’s advantage.

But, what about the future? The advisory committee on noise has recently recommended a revision in the regulations on noise which, if adopted, would include a requirement for audiometric testing for all employees exposed to sound levels above those in Table G-16, even though hearing protection has been worn. Such a regulation would require the employee to be tested within a short time after his initial exposure, and periodically thereafter. The test would have to be given by a fully qualified technician, and detailed records of the tests would have to be kept by the employer.

If you’re located in an area where test facilities are readily available, tests can be made without too much trouble. If your employees are grouped together, a mobile unit can be brought to them at a relatively low cost per test. But, suppose these facilities are not available locally? You’d have to send the employees to wherever they are available. How would you like that?

The purpose of such an audiometric test program, it is said, is to insure or test the effectiveness of the hearing conservation program. But, would it? An employer can control his employees’ exposure to noise only during the working day. What the employee is exposed
to during the other 15 or 16 hours is something else. Audiometric testing can show that a man has, or has not, had his hearing ability impaired, but it cannot show where, when or how.

Clearly, there are two actions required by responsible employers.

First, know what the law requires, and comply. It's to everyone's advantage, including your own.

Second, keep informed on what your lawmakers are doing. Proposed regulations are published in the FEDERAL REGISTER, with information on how to make comment. When proposals are made that you don't agree with, say so. The people who write the regulations in Washington truly are interested in what you think and want your help. They're hardworking, concerned people who are trying to do a good job. But, as one OSHA official put it, "If we propose a regulation and hear no comments on it, we can only assume that we are exactly right or else nobody cares".

Need more be said?

1910.95 Occupational noise exposure.

(a) Protection against the effects of noise exposure shall be provided when the sound levels exceed those shown in Table G-16 when measured on the A scale of a standard sound level meter at slow response.

(b) (1) When employees are subjected to sound exceeding those listed in Table G-16, feasible administrative or engineering controls shall be utilized. If such controls fail to reduce sound levels within the levels of Table G-16, personal protective equipment shall be provided and used to reduce sound levels within the levels of the table.

(2) If the variations in noise level involve maxima at intervals of 1 second or less, it is to be considered continuous.

(3) In all cases where the sound levels exceed the values shown herein, a continuing, effective hearing conservation program shall be administered.

Table G-16—Permissible Noise Exposures

<table>
<thead>
<tr>
<th>Duration per day, hours</th>
<th>Sound level dBA slow</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>90</td>
</tr>
<tr>
<td>6</td>
<td>92</td>
</tr>
<tr>
<td>4</td>
<td>95</td>
</tr>
<tr>
<td>3</td>
<td>97</td>
</tr>
<tr>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>1 ½</td>
<td>102</td>
</tr>
<tr>
<td>1</td>
<td>105</td>
</tr>
<tr>
<td>½</td>
<td>110</td>
</tr>
<tr>
<td>¼ or less</td>
<td>115</td>
</tr>
</tbody>
</table>

When the daily noise exposure is composed of two or more periods of noise exposure of different levels, their combined effect should be considered, rather than the individual effect of each. If the sum of the following fractions: $C_1/T_1 + C_2/T_2$ exceeds unity, then, the mixed exposure should be considered to exceed the limit value. $C_n$ indicates the total time of exposure at a specified noise level, and $T_n$ indicates the total time of exposure permitted at that level.

Exposure to impulsive or impact noise should not exceed 140 dB peak sound pressure level.

There's no doubt that today's pesticides do an ever-better job in fighting turf and plant problems. And there's no doubt that Exhalt 800 Sticker-Extender prolongs that effectiveness. Gives you longer action. Prevents wash-off. Cuts your costs substantially over a season.

Exhalt 800 encapsulates and holds pesticides where you want them—on the turf and plant foliage. It flexes with leaf growth, for longer action. Even if it rains an hour after application you still get full extender activity!

For More Details Circle (119) on Reply Card


Landscape Awards
Presented by First Lady

For the third time in the 21 year history of the program this year's Landscape Awards Ceremony of The American Association of Nurserymen took place at the White House. Mrs. Richard Nixon presented awards to individuals, business and industrial firms, institutions and municipalities involved in 21 outstanding environmental landscaping achievements at the White House.
What Is The Real Value of a Tree?

ASCA Meeting Report

At the eighth annual meeting of the American Society of Consulting Arborists a panel of the members plus speakers from the Internal Revenue Services, the insurance industry, and the state treasurer’s office of Florida, sought information on something which Joyce Kilmer knew in 1913.

When Kilmer wrote his poem “Trees” he knew the value of a tree. And today the arborists are still looking for a tree evaluation formula which will be satisfactory to the homeowner who loses a tree, the insurance company which is asked to pay on a tree-loss, and the IRS which takes a close look at casualty losses claimed on income tax returns.

An interesting tie-in between Joyce Kilmer who was killed in World War I and the arborist of 1974 was brought about by Rutgers University, in New Brunswick, New Jersey. The University presented to the American Society of Consulting Arborists a gavel and block made from the wood of the old Kilmer oak.

Joyce Kilmer was a student at Rutgers University prior to his enlistment in the army, and on the campus was a huge white oak said to have inspired his now-famous poem. The tree was finally taken down in 1963 after years of gradual decline. At that time it was 68 feet tall, had a spread of 108 feet, and a trunk diameter of 54 inches. From the wood of the old tree, Rutgers University made the gavel and block presented to ASCA President Walter Morrow at the recent meetings.

At the annual meeting in Tampa, Florida, ASCA devoted three days to discussions of tree values. Ray Gustin, Jr. (Maryland) headed a panel of guest speakers consisting of Internal Revenue Agent John Pitcher from the Tampa offices, William McCue from the Florida state treasurer’s office in Tallahassee, and William Carter from the General Adjustment Bureau in Tampa.

Following their discussions on what they thought a tree was worth, the ASCA membership set out to update their viewpoints to be more in line with ours. Case history committee chairman, Fred Michu (New York) was instructed to immediately contact the National Insurance Associations in an attempt to reconsider their 1954 declaration that maximum payment for tree loss on a homeowner policy was $250.

Past president Dr. L. C. Chadwick (Ohio), with a panel of two nurserymen — Valleau Curtis (New York) and Arnold Webster (Iowa), and three well recognized “big tree” movers — William Rea (Mass.), Edwin Irish (Mich.), and O. J. Andersen (Texas), supplied fuel for the burning of the old fashioned ideas of tree values. The ASCA nurserymen presented actual figures on costs of raising various kinds and sizes of shade trees, and the ASCA “big tree” movers quoted costs of moving and planting the large specimens to replace those lost by hurricane, lightning or other types of casualties.

It is the anticipation of ASCA that the continued examination of all facts dealing with tree costs will bear fruit in the acceptance of more realistic values for tree losses by both the insurance companies and the Internal Revenue (continued on page 60)

HYDRO-FLAIL
The new, “reach anywhere” HIGHWAY BOOM MOWER


Hydro-Flail features 1) a unique spring-mounted flotation head to assure close, even mowing on uneven ground 2) a dynamically balanced high-speed cuttershaft for vibration-free mowing 3) a safety breakaway with automatic reset. 4) powered by a 21.5 horsepower motor Hydro-Flail cuts grass and brush on banks more than 17 feet above ground level with side reach of more than 15 feet. And it fits on most tractors in 40 horsepower class or better Call LEHARA today about Hydro-Flail.

LEHARA EQUIPMENT CO., INC.
MAIN OFFICE AND PLANT
Edgeboro Rd. Box 309
East Brunswick, New Jersey 08816
Phone 201-238-3322

For More Details Circle (148) on Reply Card

WEEDS TREES and TURF
INSECTS OF ORNAMENTALS

EASTERN TENT CATERPILLAR

(\textit{Malacosoma americanum})

TEXAS: Reported in crab apple and plum in Brazos County. Populations appear very light this year in most central area counties.

WHITEFLY

(\textit{Aleuroplatus berbericolus})

NEW MEXICO: Collected from \textit{Mahonia} sp. at Roswell, Chaves County. This is a new State record.

SOFT SCALE

(\textit{Ceroplastes ceriferus})

SOUTH CAROLINA: Light on euonymus in Marlboro County. This is a new county record.

PIT SCALE

(\textit{Cerococcus deklie})

FLORIDA: Adults general on stems of 10 Coastal Plain willow trees (\textit{Salix caroliniana}) at country club in Miami, Dade County. This is a new host record in State.

TREE INSECTS

SOUTHERN PINE BETTLE

(\textit{Dendroctonus frontalis})

ALABAMA: Nearly grown larvae of \textit{D. frontalis} and \textit{D. terebrans} (black turpentine beetle) heavy in 5 to 25 dead and dying pines near Chewacla Park, Lee County. Two of these 40-foot pines practically cleaned of bark. Beetle broods fed on by flickers and sap suckers, but still numerous enough to bring on population explosion in this 200-acre tract of pine timber. Several new pitch tubes of \textit{D. terebrans} observed in area; beetles moved in on these and nearby pines during past 30 days of warm temperatures. About 500 pines killed in Mount Olive area of Jefferson County; many more trees on area infested. Full-grown larvae and pupae collected.

SEQUOIA PITCH MOTH

(\textit{Vespamima sequoiae})

WASHINGTON: Larvae ranged 2-10 per tree on ten 10-foot tall ponderosa pines at Centralia, Lewis County. Pitch masses ranged 1-10 per tree on 10 of fifty 10 to 25-foot tall ponderosa pines at Bellevue, King County.

PINE SPITTLEBUG

(\textit{Aphorophora parallela})

TENNESSEE: Active on Scotch pine much earlier than normal in western area.

EASTERN TENT CATERPILLAR

(\textit{Malacosoma americanum})

SOUTH CAROLINA: Moderate larval infestation noted on cherry in Marlboro County. This is a new county record. ALABAMA: Larvae in cherry and other trees in several southern counties nearing full growth. TENNESSEE: Active on wild cherry in central and western areas; webbing very apparent in some areas. Emergence very early this year; no damage to date. KENTUCKY: Egg hatch about 50 percent complete in central area.

FALL WEBWORM

(\textit{Hyphantria cunea})

NEW MEXICO: First adult of season taken in light trap at Las Cruces, Doña Ana County.

OLETHREUTID MOTHS

(\textit{Rhyacionia spp.})

NEW MEXICO: \textit{R. neomexicana} moth reared from pupae near Ruidoso, Lincoln County. This is a new county and forest record. CALIFORNIA: \textit{R. bushnellii} pupae moderate in tips of shoots of Monterey pine trees in El Cajon and Santee, San Diego County.

WHITEFLY

(\textit{Aleurochiton forbesi})

NEW JERSEY: Collected from \textit{Acer platanoides} (Norway maple) at Lake Hopatcong near Rockaway, Morris County. This is a new State record.

---

---
ASCA (from page 58)

Service.

Author of the recent book, “The Private Practitioner in Agriculture”, Dr. Robert S. Cox of Lake Worth, recounted many of the interesting portions of his book as he addressed the meetings. Cox, a former university professor now in the field of private consultation work, described the pitfalls to be avoided while consulting as well as highlighting the methods which proved most beneficial to him.

W. Doyle Kincade (Colorado) presented a self-contained package he developed for showing to school children as well as adult groups. The two 35mm projectors synchronized with tape recorder fascinated even the more "hardened" ASCA members as the story of the trees - woods - rivers - streams unfolded in picture and sound.

During the final business sessions the following were elected to lead ASCA during 1974: W. Roland Shannon (Penn.), President; O. J. Anderson (Texas), President-Elect; F. Earle Martin (Ontario), Vice President; William P. Lanphere (Ohio), Secretary-Treasurer. Directors are: Walter J. Barrows (Cal.), William J. Barrows (Ohio), Willfred Wheeler, Jr. (Mass.), Charles H. Michler (Kentucky), and Arnold Webster (Iowa). Walter P. Morrow (Penn.), as immediate Past President will also serve on the Board of Directors. Dr. Spencer H. Davis, Jr. was reappointed as the Executive Director.

Chelated Micronutrients From New Plant

Agriculture has better access to a supply of fully chelated micronutrients with the opening of a new production plant at the Western Division of Dow Chemical U.S.A., Pittsburg, Calif.

The new plant, which began operation in late February, is the only facility west of Freeport, Texas, designed specifically for the production of chelated micronutrients.

Manufactured products will be marketed primarily in the western U.S., but also will be available to the general national agricultural market as well.

The plant will initially produce Versene AG brand one-pound zinc micronutrient, one of five fully chelated micronutrients available under the Versene AG and Versenol AG trademark.

Versene AG one-pound zinc contains one pound of fully chelated zinc in every gallon. It requires less storage and handling and is simple to formulate. Dow recommends for use alone, in combination with fertilizers or as foliar spray. They are most effective when placed in the root zone during planting or moved into the soil by irrigation, tillage or rainfall.

Rates of application will vary depending upon the severity of the deficiency, climate and soil conditions and method of application.

For further information, contact Dow Chemical U.S.A., Designed Products Department, 2040 Dow Center, Midland, Mich. 48640.

Environmental Stress Victimizes Windbreaks

USDA foresters say that trees established in the Plains are subjected to greater stresses in moisture, temperature, and wind than trees in naturally forested areas. To avoid further jeopardizing these trees' existence, they advise extra protection from outside agents such as insects.

According to officials at the Rocky Mountain Forest and Range Experiment Station, frequent tree inspections and early recognition of insect damage are the main ingredients of an effective insect control program.

The most common insects attacking windbreaks in the Plains' areas are leaf eaters. These insects may include spring and fall cankerworms, tent caterpillars, webworms, bagworms, elm leaf beetles and grasshoppers.

Insects can cause defoliation and repeated attacks can seriously weaken and ultimately kill a tree. Trees weakened by insects are also more susceptible to various diseases.

Whenever insect damage is suspected, tree owners are advised to collect specimens of the insect and damaged area for identification. These specimens will enable a county agent or extension service entomologist to identify the insect; determine the need for control, and advise on control measures.

Sevin insecticide is widely recommended and used for control of insects plaguing Plains trees. It may be applied with ground application equipment at the rate of 1 lb. active Sevin per gallon of water. It also may be applied by air.

Sevin is cleared for control of a number of shade tree, ornamental and turf insects. It is biodegradable and is low in toxicity to people, farm animals, birds and fish.

Microfiche Catalog System Speeds Parts Indexing

Ryan turf care equipment has converted its parts catalogs into a microfiche system.

Microfiche are 4 by 6-inch film cards that are indexed for quick access through a reader. A parts page is reduced 24 times in size on a microfiche card.

Compatibility systems already in use throughout the industry assure simplicity, speed and standardization. The microfiche system will also enable dealers to free up counter space previously devoted to parts catalogs. The system was developed by Xerox and was introduced in April.
This page is provided for your convenience. To obtain additional information on new products, trade literature and advertised products in this issue, simply circle the corresponding number on the perforated card below, fill in your name, business address and mail the card. No postage is required.

FOR MORE INFORMATION FILL OUT AND MAIL TODAY!

Please send more information on items circled
(Please type or print) 5/74

Name .......................................................... 
Position ....................................................... 
Company ....................................................... 
Street ........................................................ 
City ............................................................ 
State ........................................................... Zip Code .....................................
Signature .................................................... 

Please describe your type of business ................................................................. 

Note Inquiries serviced until July 20, 1974
Use this convenient card if you wish to receive further information on products and services advertised or described in this issue.