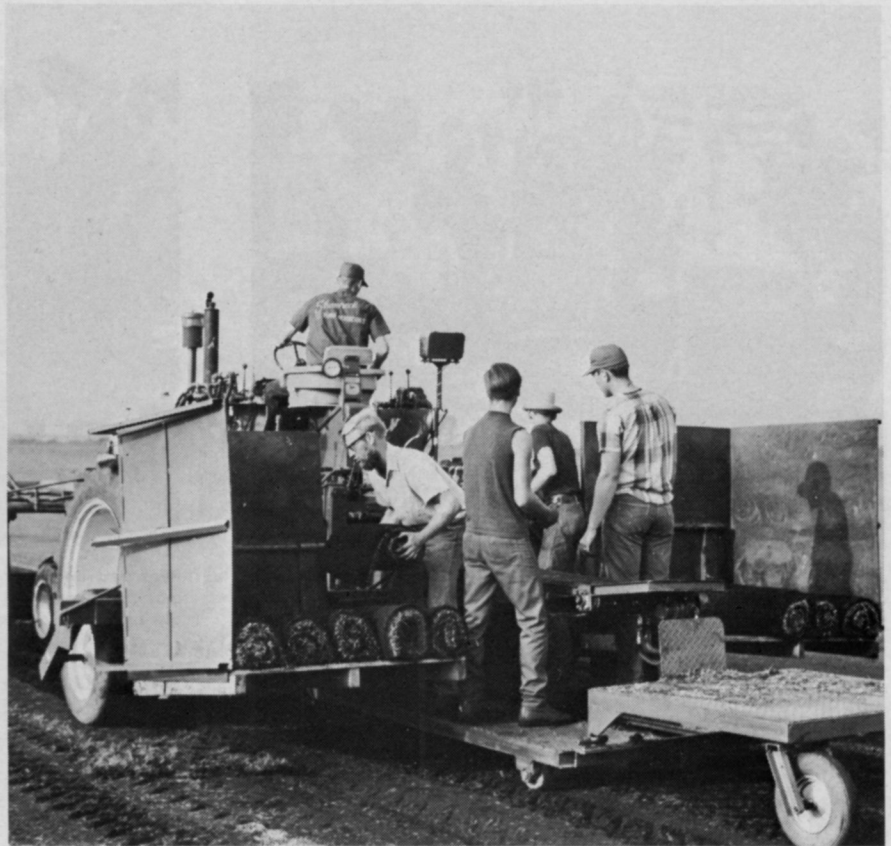


morning and a rain shower just after lunch dampened spirits but sunshine prevailed for the equipment demonstrations which proved to be the highlight of the event.

President of the group, Ben O. Warren, Warren Turf Nurseries, Inc., Palos Park, Ill., called officers and directors together for a short business meeting early in the day. Biggest concern apparently is how to enroll more growers as members of the new national organization. Membership at present is just more than 100 and more are needed to support new activities which are planned for ASPA (see WTT editorial, page 4).

The Shamrock operation which is a model for production of quality sod features acreage leveled



Sod roller was designed and built by Don Morrill for use on Shamrock Turf farm. Unit as yet is not commercially available.



GET A HEAD START
ON
GROUND MAINTENANCE

with **OREGON GROWN** fine leaf
RED
FESCUE

- FINE TEXTURED—Companionable with other grasses.
- DURABLE—Resist heavy traffic.
- WIDELY ADAPTED—More tolerant to adverse conditions.
- PRODUCE DENSE SOD—Inhibits weed growth.
- DEEP ROOTED—Drought resistant.
- ECONOMICALLY MAINTAINED—Slow growing.
- LESS DEMANDING—On fertilizer requirements.

Information & Sample Packets
Available on Request.

OREGON FINE LEAF FESCUE
COMMISSION
605 Weatherly Bldg. Portland, Ore. 97214

For More Details Circle (107) on Reply Card



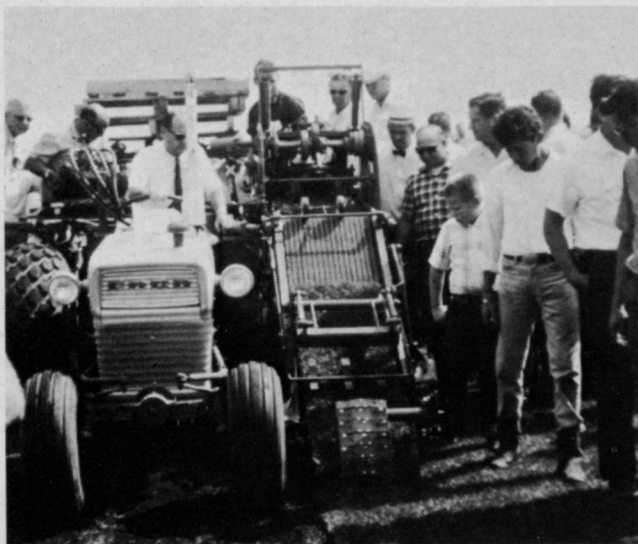
HADFIELD AUTOMATIC SOD ROLLER PATENTED

"Invented by G. HADFIELD, seated"

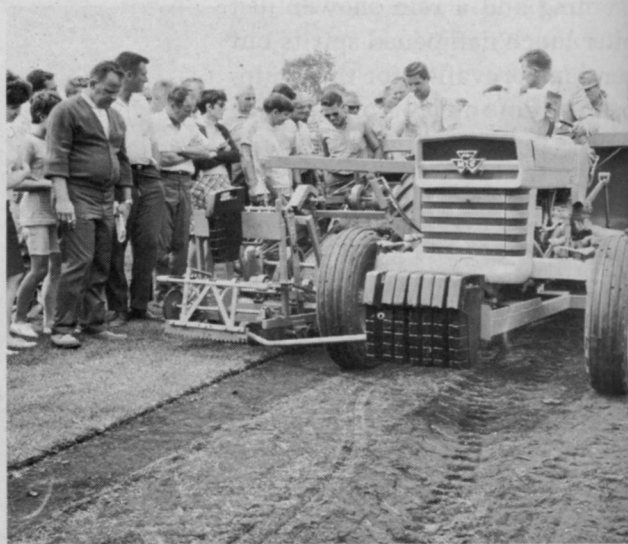
1. Attaches to any Ryan sod cutter
2. Sod plows will turn heavy mineral soil rolls easily to side as they have a pickup and roll action, and will not pull your cutter sideways
3. Reel to roll sod is ground driven so roll does not get ahead of reel
4. Remove sulky and roll sod by walking where fields are wet or short runs.

HADFIELD SOD ROLLER COMPANY
4643 Sherwood, Oxford, Michigan 48051 Phone 313-628-2000

For More Details Circle (108) on Reply Card



John Nunes demonstrates NUnes sod harvester. This unit will handle either rolls or slabbed sod and has capacity for up to 1200 square yards per hour.



Ryan sod harvester demonstrated at ASPA field day is designed for major sod growers who use pallet method. Ryan also exhibited complete line of sod equipment.



Newest piece of sod equipment on display was Ryan sulky, roller attachment for standard Ryan cutter.



Side view of Don Morrill's sod harvester. Unit is designed to roll sod for pallets.

for drainage, complete wheel-move irrigation system, and a comprehensive marketing program. Morrill who is president and general manager of Shamrock has been active in ASPA since its inception and made a significant contribution in making sod acreage available for the national field day demonstrations.

Attendance was greater than expected by the officer and director group. They were encouraged by the interest of growers from 12 states, representing all sections of the country. In addition, more than 30 growers from Canada were on hand.

Next major event of the ASPA, according to Executive Secretary George Hammond will be the winter annual meeting. This session is scheduled for Miami Beach, Fla., January 19-24, in conjunction with the 40th International Turfgrass Conference and Show which is sponsored by the Golf Course Superintendents Association of America. Headquarters will be the Hotel Fontainebleau.

Davey Seeks Variance On State Safety Code

The Davey Tree Expert Co. is seeking a variance from New York's industrial safety code to permit employes to "ride the hook" at the end of a crane.

Section 23 of the state's industrial Code prohibits "riding the hook" which means that a man cannot ride atop a load being swung by a crane, or cannot himself be suspended from the hook.

Raymond Smith, district manager of the tree company in Lancaster, testified at a hearing that his firm felled 20,000 diseased elm trees in Buffalo, N. Y. without a single injury to employes who "rode the hook."

The firm was cited as being in violation of the code last February. The hearing in the State Office Building was conducted by William C. Levis, the hearing officer for the Labor Department's Bureau of Standards and Appeals.

Smith told Levis that Davey Tree Expert Co., a national operation based in Kent, Ohio, had found that riding the hook was the safest method for felling diseased trees.

The method involves suspending a man wearing a safety harness from the end of a crane hook and lowering him into a position where he can attach a crane cable to a limb. The man then slides down a safety line to the ground, the limb is cut by a chain saw and the crane lowers the severed limb slowly to earth.

Smith testified that the method is far more safe than having a man climb a diseased tree and crawl out on a limb that is in danger of cracking, in order to attach a cable.

The Davey firm was supported in its request for a variance by representatives of the New York State Arborists Association, a competitor, and by Niagara Mohawk Power Corporation. The utility company often finds itself trimming or removing trees that interfere with power lines.

Levis said that if the variance is granted by the board, it will apply to limited conditions such as tree removal or trimming and will not make riding the hook permissible in industry. He added that "the need for safety will be paramount in any determination made by the board."

Merion Bluegrass Meeting Drew Large Attendance

President Arden Jacklin of Jacklin Seed Co., Dishman, Wash., presided over the 15th Annual Meeting of the Merion Bluegrass Association, one of the best attended sessions in the group's history, held recently at Coeur d'Alene, Idaho.

Among the various topics discussed was the present status of Merion. Dick Bailey of W. R. Grace & Co. Rudy-Patrick Division reported that his findings from a recent tour showed Merion is the main grass used in extensive sod areas.

Arden Jacklin reported on research grants at Oregon State University and Rutgers University, both optimistic about obtaining a satisfactory control for stripe smut.

The hydro, "Miss Merion Bluegrass," winner of the Englehard Palladium Perpetual Trophy at the International Grand Prix in Miami, attracted a great deal of attention during the meeting.

Tuesday was devoted to the traditional farm tour. First stop was the Coeur d'Alene U. S. Forest Service Tree Nursery, which furnishes tree stock for 16 stations.

During the tour, a radius of 25 miles was covered in the examination of various fields of not only Merion but of Pelo ryegrass, NK 100 ryegrass, 0217 Fylking Kentucky bluegrass, Canada bluegrass, A-34 shade tolerant bluegrass, Norlea ryegrass, Park Kentucky bluegrass and S-2 Kentucky bluegrass.

After a luncheon at the State Line and River Ranch of Jacklin

Seed Co., the remainder of the day was spent in the examination of the turf trial grounds and lawn plots at the Ranch and of various segments of Jacklin's expansion program.

Cornell Conference Scheduled for Winter

The Cornell Conference for Nurserymen, Arborists, Garden Center Operators, and Landscape Contractors formerly held in July has been moved to a winter time slot.

The expanded winter series will include meetings at both regional and on-campus locations to enable more ornamental horticulture businessmen to participate and will be geared to their needs as managers of production, sales and service businesses.

Regional conference workshops will consider topics in depth, supplemented with talks of general interest. The Ithaca seminars, on the other hand, will treat in considerable depth specific topics such as employee management, nursery stock harvesting and storage, garden center layout, arboriculture, and horticultural service business management.

A complete program will be available in early fall.

Bermudagrass Mite Damage Difficult to Diagnose

The bermudagrass mite, a tiny wormlike pest that can't be seen with the naked eye, has been causing increased turf damage, reports Dr. S. H. Kerr, entomologist with the University of Florida's Agricultural Experiment Stations.

Coarse, dried bermudagrass is hardest hit. Infested blades turn light green, curl up abnormally and may eventually die. Many homeowners, says Kerr, mistake these signs for damage caused by nematodes or disease. He recommends diazinon for effective control of the mites.

New ARS Technique Aids Herbicide Evaluation

Agricultural Research Service plant physiologist W. A. Gentner has developed a new technique enabling scientists to evaluate mere specks of herbicides, according to the U. S. Dept. of Agriculture.

Previously as much as 10 grams of an herbicide were required to do a similar evaluation. This could be problematic, as some experimental herbicide samples are expensive and often available only in small amounts.

With Gentner's simple device, scientists can determine exactly a plant's tolerance to a chemical. This knowledge will make possible more precise application of herbicides by drawing a sharper line between a plant's tolerance of and ill effects from an herbicide.

Glass wool that serves as a filter is placed in a test tube with a 1/4-in. hole in its bottom. The tube is then filled to about 1 1/2 ins. from the top with quartz sand, into which is planted the seed to be tested. The tube, fitted with a rubber collar, is suspended in an Erlenmeyer flask containing a nutrient solution and concentration of the herbi-

cide to be evaluated. Once a day the tube is dipped into the solution.

Gentner points out that while his apparatus gives precise data on the effect that the structure of an herbicide molecule has on the plant's activity, it does not give the complete story. Many techniques, including field studies, are necessary to completely evaluate the effects of herbicides.

Gentner's work is part of an ARS research program to improve pesticide effectiveness and avoid potential residue hazards.

Cornell University Publishes DED Leaflet

A new tree pest leaflet from Cornell University is now available. It is entitled "Municipal Decisions in Dutch Elm Disease Control," and is authored by Drs. W. A. Sinclair, W. T. Johnson and J. A. Weidhaas. Dr. Weidhaas is now an extension specialist at Virginia Polytechnic Institute, Blacksburg, Va.

The new publication gives background facts on problems which face communities seeking to establish DED control programs. The authors list the al-

ternatives of a community beset with the disease. They discuss requirements for municipal control programs along with public information and funding. They also list some reasons why programs fail.

Copies of the new publication are available from New York State College of Agriculture, Cornell University, Ithaca, N.Y. Ask for Cornell Tree-Pest Leaflet A-4.

Urban Environment Causes Problems for Plant Growth

Cultivating plants in urban communities may become extremely difficult with time, cautions F. O. Lanphear, Purdue University research horticulturist.

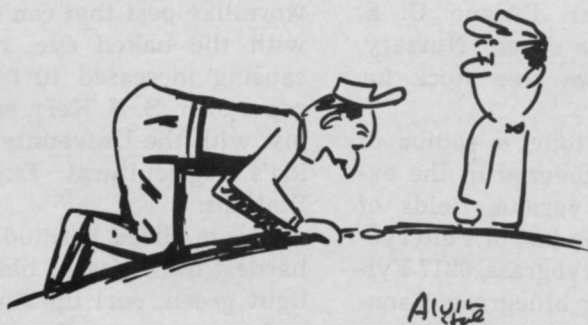
Effects from increased air pollution, salt used on highways as deicing agents and lack of sufficient area for proper root development can hamper the growth of plants trying to survive in urban environments, he says.

Some plants (such as the Austrian pine), once thought to be adaptable to city conditions, are now found to be susceptible to increased air pollution. Lanphear cites the case of a Chicago-area grower of orchids who estimates that air pollution costs him \$150,000 annually due to crop injury.

Many other species, however, continue to appear tolerant (such as sweet gum, hackberry, American elm, ginkgo, pin oak, Norway maple and ash).

Lanphear feels these injurious conditions should be remedied, as plants are capable of benefiting urban communities in many ways.

As urban temperatures generally range 10°-15° higher than those of the countryside, he notes that the use of green space (composed of various forms of vegetation) may help modify



SURE IT'S DOLLAR GRASS,
I?'S GOT "IA GOD WE TRUST"
ON IT!"

climate as well as provide recreation.

Shrubs and trees planted between sources of noise and areas where people congregate can serve as buffers.

Plants, too, are not only capable of acting like "air conditioners" by removing dust and soot from the air, but they can enrich the air with oxygen, according to Lanphear.

Furthermore, he says, the fragrant aromas of some plants help to compensate for less desirable odors that exist in the city.

Citgo Establishes New Beautification Program

Cities Service Oil Co., (CITGO), a subsidiary of Cities Service Co. of New York, has produced a film presentation depicting the visual impact of its current service station beautification program.

Entitled "More Than A Bed Of Roses," the brief film shows how CITGO stations have benefitted from using the latest in design, landscaping, lighting and merchandising methods.

In the film, CITGO emphasizes its belief that an attractive place of business is beneficial not only to the company but to the community it serves, as well.

Suppliers Staff Changes

S. E. Cook, Jr. has recently been appointed assistant district manager for agricultural chemicals in the Hercules Inc. San Francisco office.

Amchem Products, Inc. announced two staff changes: Herbert L. Groshens has rejoined the company as agricultural chemical sales representative of the mid-Atlantic district after a two-year absence; John G. Neckerman has been appointed agricultural chemical sales rep in the Pacific Northwest.

Thompson-Hayward Chemical Co., Kansas City, Kans., has appointed Mamoru Matsuzaki tech-

nical sales representative of its office in Fresno, Calif. The company also named Donald Fox director of field research and development of its North Central region.

Diamond Shamrock Chemical Co., a unit of Diamond Shamrock Corp., Cleveland, O., announced the establishment of its newly organized Bio-Chemicals Division. Dr. Melvin Hochberg has been appointed to head the new division as vice president of Diamond Shamrock Chemical Co. and Bio-Chemicals Div. general manager. M. F. Wilkerson has been designated director of marketing and sales for the new division. Harry A. Batley has been appointed president of the Nopco Chemical Division and a vice president of Diamond Shamrock Chemical Co. Warren Dusenbury has been named administrative vice president of the Nopco Division.

Duane L. Closs has been appointed Director of Sales for all single engine business, pleasure, training and agricultural aircraft marketed by the Aero Commander-Albany (Ga.) Division of North American Rockwell Corporation.

Norman Ronemus has been named Manager, Product Development of Colloidal Products Corp., Sausalito, Calif.

Barton P. Jenks III has been appointed to the law department of the J. I. Case Co., Racine, Wisc., in the capacity of assistant general counsel.

Jack Q. Miller has been named area manager at Fox Tractor Division of Koehring Co., Appleton, Wisc. The division also appointed Harold E. Bayless and Robert E. Evensen as regional sales managers. The Brady Division of Koehring Co., Des Moines, Iowa, has named Ted J. Auer its central region sales manager.

Nalco Chemical Co., Chicago, has announced several changes within its Industrial Division: R. W. Graff and E. H. Hurst have

been promoted to regional managers in Chicago; W. H. Clark will replace Grass as Michigan district manager; R. J. Menard will replace Hurst as manager of the South Atlantic district; P. J. Hallson has been promoted to district manager of the Wisconsin district; and C. A. Smith will become manager of the expanded Carolina district.

Merton W. Klemm has been designated a territory manager for the Brady Div. of Koehring Co., Des Moines, and will be responsible for farm machinery sales to dealers in southeast Wisconsin.

W. E. Kautenberg Co., a subsidiary of Furst-McNess Co., both of Freeport, Ill., has recently appointed Frank A. Rever to the post of assistant to the president. Mr. Rever's initial responsibilities will concern new product development and market expansion.

C. Kenneth Claunch has been named Product Marketing Manager for the Industrial Chemicals Div. of Mallinckrodt Chemical Works.

Nathaniel Matlin has established The Matlin Company, Inc., 21 S. Main St., Yardley, Pa., to provide marketing assistance and communications and product development service to clients in scientific, technical, medical, industrial and agricultural fields.

Dr. J. Benton Jones has joined the staff of St. Louis Testing Laboratories, Inc. as a Consulting Agronomist.

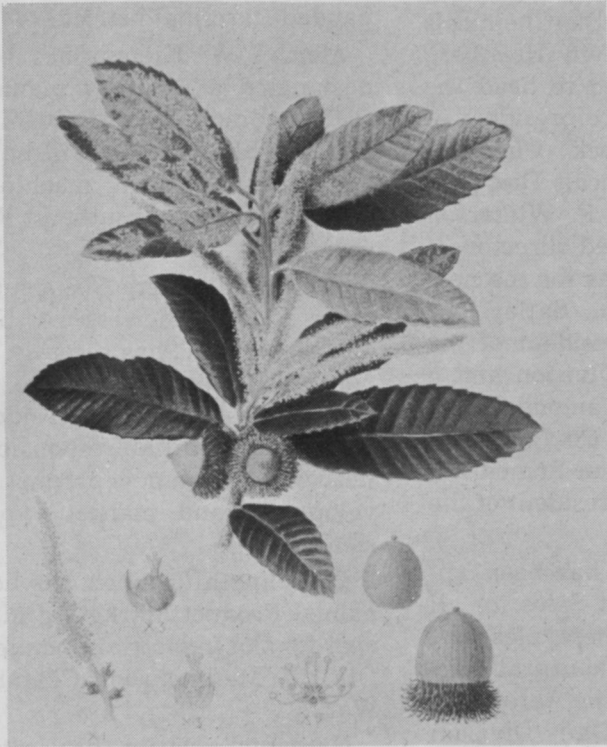
Jack T. Langley has been appointed a sales and technical representative of Retzloff Chemical Co. in their southeastern regional office at Atlanta, Ga.

John G. Messenger has joined Allis-Chalmers as manager of marketing for its farm equipment division.

Richard E. Whitson, Jr. has been designated Manager of Insecticide Clay Sales for the Oil-Dri Corporation of America, headquartered in Chicago.

TANOAK

(*Lithocarpus densiflora*)



Picture from: Murman Slide Collection, Library,
University of California at Los Angeles.

Prepared by: O. A. Leonard, Botanist, assisted by B. J. McCaskill,
Senior Herbarium Botanist, Botany Department,
University of California, Davis, California.

Although tanoak (*Lithocarpus densiflora*) is not a *Quercus*, it is closely related to and has been included in the genus in the past. There is only a single species in western North America, but there are about 300 of them in eastern and southeastern Asia and Indomalaysia. In California a dwarf variety (*L. densiflora* var. *echinoides*) also occurs. Both tanoak and members of the genus *Quercus* belong to the beech family (*Fagaceae*).

Confined to the Pacific Coast states, tanoak occurs in both coastal mountains and in the Cascades

and Sierra Nevadas. It is an evergreen tree 60 to 150 feet high with a conical crown and thick fissured bark. The oblong, leathery leaves are 1½ to 5 inches long and 1 to 1¼ inches wide with petioles approximately ½ inch long. Light-colored when young, they become almost glabrous with age. Flowers are in erect catkins 2 to 4 inches long; acorns are from 1 to 1½ inches long and are surrounded at their bases by a shallow bur-like cup with slender recurving scales. They mature the second year.

Tanoak is a common constituent of the Douglas-fir and redwood forests of the Pacific Coast. Following forest fires or logging the tanoak recovers rapidly due to its ability to develop basal sprouts. This recovery works to the disadvantage of Douglas-fir, whose young seedlings have difficulty competing against dense stands of sprouting tanoak. In the past, tanoak had been used to a small extent for lumber and its bark for tannin. Today the bark is no longer used for tannin and future prospects of using the tree for lumber are limited. The problem, then, is to control this species sufficiently to prevent the present pattern of conversion of valuable Douglas-fir forests into low-value tanoak forests by logging.

Tanoak is not only of limited value as a forest tree but also as browse for domestic livestock or big game. There is some interest in converting tanoak covered areas into range, but control of the species is difficult. However, there are methods in which herbicides can be used in forested areas for tipping the ecological balance in favor of Douglas-fir and some other coniferous species.

On sites where there is an understory of Douglas-fir, a brush killer mixture of 2,4-D and 2,4,5-T (or 2,4,5-T alone) can be sprayed by helicopter in March or April, using about 3 pounds of acid equivalent per acre. The main point is to make the applications prior to the growth of the conifers so they will not be injured. Reapplication should be planned in about 2 years and again, perhaps, after a lapse of 2 or 3 more years. In this manner, the tanoak can be suppressed, giving the conifers an opportunity to out-compete them.

It is also possible to make several types of applications with ground equipment. The understory tanoak can be sprayed with a mist blower and the larger stemmed trees can be treated with 2,4-D amine applied to cuts in the stems in winter or early spring.

Classifieds

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

Rates: "Position Wanted" 10c per word, minimum \$3.00. All other classifications 20c per word, minimum \$4.00. All classified ads must be received by Publisher the 10th of the month preceding publication date and be accompanied by cash or money order covering full payment. Bold-face rule box: \$25.00 per column inch, two inch minimum.

HELP WANTED

TREE CLIMBERS and ground men, experienced, New York City tree removals, \$5.20 hour. Write to 128-10 26th Ave., College Point, New York 11354 or Phone 939-3500.

FOR SALE

VERMONT'S Pioneer Turf Farm, 220 acres. 90 acres level tillage, light loam, 1,500,00 feet certified Merion ready to harvest. Expanding market near rapidly growing areas and ski centers, also feasible to market in out-of-state metropolitan areas. New equipment, good house, other buildings. Much valuable highway frontage, timber, water, etc. Fine opportunity. Investigate. Write or phone B. G. Day, Johnson, Vermont 05656. Phone 802 636-2580.

120 ACRE sod farm, all muck and peat. Just 1/2 mile north of East Lansing, Michigan on black top road. All seeded to Merion. Well and pond for irrigation. John Bower, R2,

Grand Ledge, Mich. 48837. Phone 627-6107.

USED EQUIPMENT

ONE BEAN SPRAYER, 35 gallons per minute, 800 pounds pressure, engine 30 horsepower, Wisconsin, 4 cylinder, 400 gallon tank, good condition. Therkiidsen's Nursery, 4830 Ames Ave., Omaha, Nebraska 68104. Phone 451-6047, James L. Therkiidsen.

New Seal Identifies Merion Bluegrass Seed

A new seal now identifies Merion bluegrass seed for Merion Bluegrass Association members who support the Merion advertising and promotion campaign.

An oval sticker, about the size of a quarter, has the notation, "Member in Good Standing," encircling the initials "MBA." It is designed for attachment to bag tags and packages.

President of the Association, Arden Jacklin, Jacklin Seed Co., Dishman, Wash., states that it

Advertisers

INDEX TO ADVERTISERS

Brillion Iron Works, Inc.	3rd Cover
Chipman Chemical Co., Inc.	4
Geigy Chemicals Corp.	4th Cover
Hadfield Sod Roller Co.	31
International Harvester Co.	20, 21
Jacklin Seed Co.	38
Knowles Tree Service, Heller-gro	17
Mitts & Merrill, Inc.	5
Mobile Aerial Towers, Inc.	19
Mott Corp.	37
John Nunes Mechanical Harvesting Co.	2nd Cover
Oregon Fine Leaf Fescue Commission	31
Robert B. Peters Co., Inc.	37

will be to the mutual advantage of both seller and purchaser if buyers insist on this identifying seal. The seal will appear on the bag, on the confirmation of the order, and on the invoice. This will serve to designate the seed source as an MBA member in good standing, and one who has paid the voluntary advertising assessment.

PETERS SPECIAL

SOLUBLE FERTILIZERS

Completely chelated all purpose feeds

Contain all necessary trace elements in a completely available form. -- Contain very effective color tracers -- Contain effective penetrating agents. --

Ideal for all types of foliar, turf and root feeding.

Compatible with all commonly used spray materials.

The finest soluble fertilizers ever made! Try them and see!

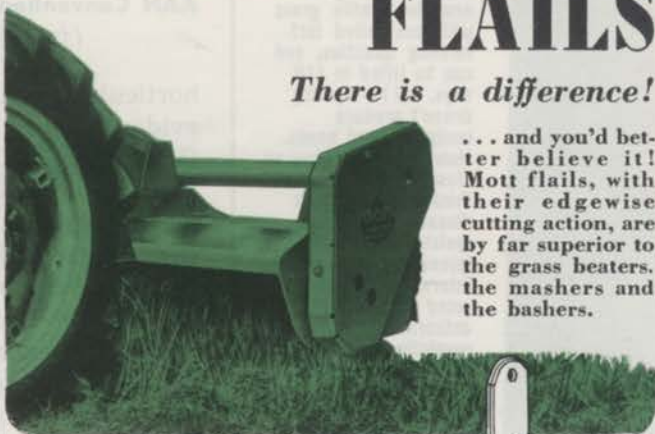
Inquire from your jobber or write direct to us for further information.

ROBERT B. PETERS CO., INC.
2833 PENNSYLVANIA ST. ALLENTOWN, PA.

For More Details Circle (109) on Reply Card

FLAILS FLAILS FLAILS

There is a difference!



... and you'd better believe it! Mott flails, with their edgewise cutting action, are by far superior to the grass beaters, the mashers and the bashers.

20 YEARS of know-how ... makes the Mott for 1968 greater in cutting ability ... better cutting with less power! Mott is the only Hammer Knife Flail mower — none can compare! It isn't built to beat a price line. It's engineered for longer life, greater safety and better performance for a wide range of job applications.

The patented MOTT "hammer-knife" flail blades are made in six different styles—to meet every mowing need—fine lawns, weeds, leaves or renovating. The self-cleaning feature insures continued peak performance in the most adverse mowing conditions. The lightweight construction minimizes throwing of struck objects — provides greater safety.



Get a date to see the Mott for 68—we'll demonstrate.

MOTT CORPORATION

514 Shawmut Ave. LaGrange, Ill. 60525

For More Details Circle (110) on Reply Card

this blade is causing a revolution

The blade revolutionizing the lawns of America is 0217® Brand Fylking Kentucky bluegrass (Patent Pending). A new, low-profile grass with unexcelled turf-forming qualities; sod can be lifted in 110 days. 0217® Fylking doesn't produce unsightly seed heads. Mows smooth, thrives on close cutting. Greener, thicker — the most disease, weed, wear-resistant lawn yet (proven by 10 years of international testing — rated best by turf authorities). Join the revolution. See your seed distributor. For information or names of authorized distributors, write Jacklin Seed Co., Inc., Dishman, Wash. 99213.



FYLKING KENTUCKY BLUEGRASS

For More Details Circle (111) on Reply Card

Turf Quality

(from page 13)

Nunes feels it is superior to herbicides in the production of quality sod.

Equally important in Nunes's opinion is the proper amount of irrigation water. Nunes Turfgrass crews carry an Aquatron Moisture Meter to eliminate the guesswork from this chore.

Presently, the DuMel Company, manufacturers of Aquatron equipment, is experimenting on the Nunes nursery with a new concept in controlled irrigation — an automatic aquatron programmed so the water will turn on and off at a precise percent of moisture.

Nunes holds the exclusive U.S. franchise for this device. He is excited over its future potential as well as the sod industry as a whole.

"The prospects are unlimited," he states, "but the key to the whole business is still quality and service. Everybody wants a good lawn, and few know how to get one or keep it."

AAN Convention

(from page 24)

horticulture with journalism is evident in his activities: Sigma Delta Chi, national journalism fraternity; Alpha Gamma Rho agricultural fraternity; the Chicago Regional Rose Society; the Garden Writers' Assn. of America; and the Chicago Press Club.

Also presented at the convention, for the first time, were Retail Advertising Awards to 16 garden center firms.

Aside from the National Trade Show exhibits, an advertising workshop, various committee meetings and discussions on timely horticultural matters, the convention agenda also included a tour of Grant's Farm, a trip to the Municipal Opera and to a Cardinals-Giants game, and a tour of St. Louis homes of early 1900 vintage.

Trimming

Bigger Trees For Parks. Vandals are universal in their wanton destruction of park plantings, especially newly planted trees. Theodore Haskell, of the Lansing, Mich., Parks and Recreation Commission, believes the best solution is use of bigger trees. Vandals normally don't saw or chop down a new tree, but merely snap it off. They can't do this with 4-inch trees so usually leave them alone. Heavy equipment and trained men prove their worth with a planting program which specifies the larger sized trees.

* * *

Entertainment Or For Real? A real ESP (extra sensory perception) expert entertained arborists at the recent International Shade Tree Conference at Chicago. She predicted a sure cure for Dutch elm disease within 2 years. "Not necessarily a drug," she said, "but a means of control which already exists," implying a method undergoing trial. This proved to be quite a session for ISTC'ers, with some believers. Big majority of the group we talked with seemed as skeptical as we were.

* * *

New Hercules Service. Hercules has put together a division of environmental services. The new service unit offers coordinated efforts in three segments of the water management field—process water treatment, waste water treatment, and consulting services. The idea is excellent and will be especially helpful to town and city departments who are troubled with a combination of corrosion, scale, fouling, and algae. Problems are related and service can be received for both industrial and effluent water problems. Help in the entire field has been difficult to obtain because of the many phases of technology applicable to the problem.

* * *

WTT in Growth Phase. WEEDS TREES AND TURF magazine has now surpassed the 35,000 mark in circulation. Besides 3012 tree care companies, WTT now reaches all municipal arborists, more than 7000 custom spray operators, almost 800 sod producers, 2000 aerial applicators, 2000 irrigation contractors, more than 10,000 rights-of-way maintenance, cemetery, airport, park, athletic field, hospital, college, and general vegetation care supervisors, and 6056 golf course superintendents.

**FOR MORE FACTS
USE THE
POSTAGE FREE CARD**

You are invited to use the Reader Service card provided to obtain further information on equipment, materials or supplies appearing in this issue. This card is preaddressed and postage paid.

Your inquiry will be forwarded to the manufacturers in whose products you are interested.

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Insect Report

WTT's compilation of insect problems occurring in turfgrasses, trees, and ornamentals throughout the country.

Turf Insects

FALSE CINCH BUG (*Nysius ericae*)

Colorado: Numerous in all areas of Mesa County, especially around grasses in pastures and occasionally around gardens. Mostly nuisance; controls applied in some areas.

A HESPERIID MOTH (*Atalopedes campestris*)

Texas: Heavy, damaging grass in Caldwell and DeWitt Counties.

A SNAIL (*Zonitoides arboreus*)

California: Heavy on dichondra lawns in Sun City, Riverside County.

Tree Insects

ADELGIDS (*Adelges* spp.)

Michigan: *A. cooleyi* eggs of overwintering forms laid. Hatched in southern Lower Peninsula; complete hatch expected in 7 days further north in Charlevoix County.

LETTUCE ROOT APHID (*Pemphigus bursarius*)

North Carolina: Collected on Lombardy poplar at Zebulon, Wake County, July 2, 1968. This is a new State record.

ALDER FLEA BEETLE (*Altica ambiens*)

Oregon: Severely skeletonized 50 percent of alders along coast between Florence, Lane County, and Newport, Lincoln County.

ELM LEAF BEETLE (*Pyrrhalta luteola*)

Georgia: Heavily damaged elm foliage in Gwinnett County. **Oklahoma:** Adults feeding and laying eggs; hatch light with second-generation larvae feeding. **Kansas:** First-generation adults laying eggs in many areas. **Nebraska:** First-generation adults emerging in Nemaha County; emergence about 10 percent complete. Foliage damage 50-60 percent on American and Siberian elms at Auburn. **Delaware:** Larvae damaged elm leaves in several areas. **New Jersey:** Larvae active in central counties.

SOUTHERN PINE BEETLE (*Dendroctonus frontalis*)

Infestations continue in **Alabama, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, and Texas.** Seasonal increases expected in most areas; already increased on Bankhead National Forest in **Alabama** and on private lands in eastern **Texas.** **Tennessee:** Scattered active spots in Loudon County.

JACK-PINE BUDWORM (*Choristoneura pinus*)

Wisconsin: Browning of jack pine severe on 5,000 to 10,000 acres in northwestern Juneau County. **Minnesota:** About 15-20 percent of last instars in pupal stage in east-central areas and 25-30 percent in north-central areas.

Compiled from information furnished by the U. S. Department of Agriculture, university staffs, and WTT readers. Turf and tree specialists are urged to send reports of insect problems noted in their areas to: Insect Reports, WEEDS TREES AND TURF, 9800 Detroit Ave., Cleveland, Ohio 44102.



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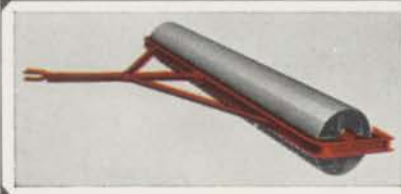
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