

Sod Winterkill Extensive

Shortage until 1971 seen in Great Lakes region

SOD WILL BE in short supply in the Great Lakes region possibly through the spring of 1971.

Producers have come to this realization as the effects of widespread winterkill in Wisconsin, Illinois and Michigan have become known.

Damage has been greatest on sod that would have been marketed this spring and summer. The shortage is most acute now and will taper off as new grass is planted and becomes available.

Most producers expected a price increase, though predictions varied. A few saw no change; a few saw prices going as high as 75 cents a square yard wholesale to the Chicago market. Yet the consensus came quickly that whatever the price it would not be enough to cover the loss.

A high-low temperature situation the last few days of March brought on the kill.

Cause Explained

Dr. James B. Beard, associate professor of crop science at Michigan State University, explained the effects of Mother Nature's sneak attack:

"The kill occurred in late winter when the turf grass plants' resistance to lower temperature stress

was drastically weakened. Temperatures dropped in a short time to near zero in late March. Both crowns and roots of grasses with a high water content were killed by freezing."

In a freeze of this type, the cellular structure is disrupted by ice causing the plant to die.

Wisconsin and Illinois producers suffered the greatest losses.

"If we (speaking of Wisconsin producers generally) can ship 50% of what we marketed last year, we'll be fortunate," reported Richard Horner of Horner Sod Farms at Union Grove, Wis. "And we planted more acreage this year than a year ago."

"Our farm is a good example," he continued. "By May 1, we had shipped only 10% of a year ago. I look for the situation to improve. We'll probably ship more in the fall—we'll have to in order to reach 50%."

Horner reported one experience that supports Andersen's explanation. In the Portage, Wis., area, one farm was completely ice-covered when the warm streak came in March. Apparently the cover kept the ground temperature low enough that the grass retained its winter resistance.

"When the ice cover finally did melt, there was no damage at all," Horner said.

Ben Warren, president of Warren's Turf Nursery in Palos Park, Ill., largest grower in the country, estimated that nearly 80% of his grass plantings were killed. Another Illinois farm, H. E. Sod Nursery, in Tinley Park, reported a similar loss.

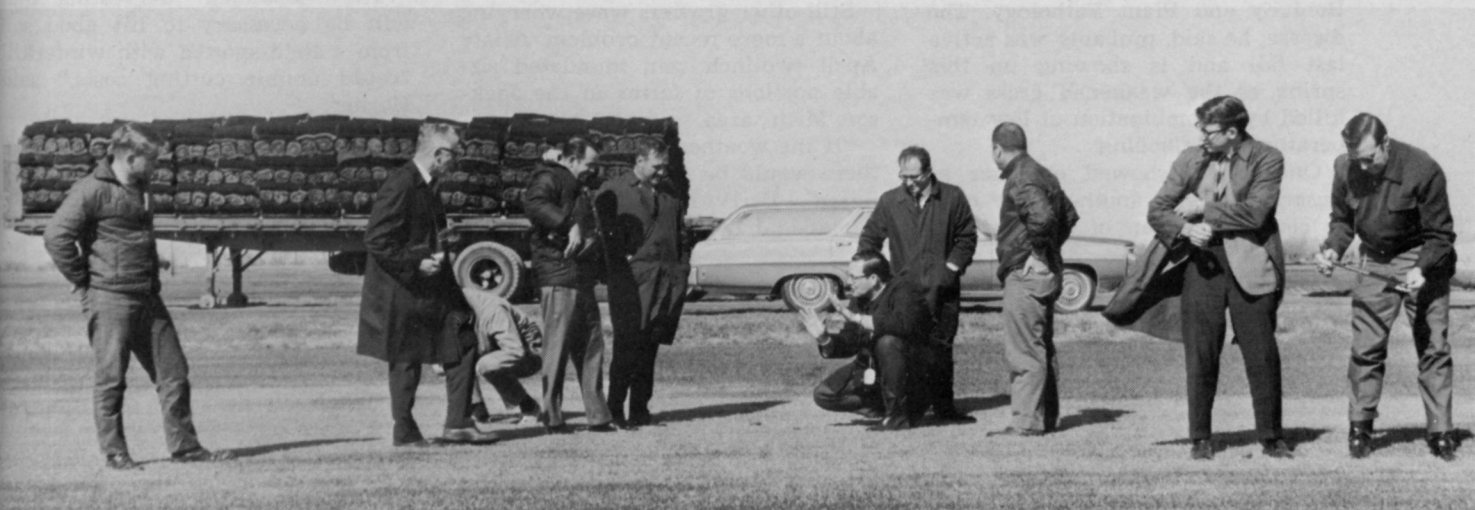
Michigan's loss was considerably less, judged to be about 15% statewide after an air-ground inspection. Some individual fields, however, suffered up to 80% damage.

New York and New Jersey area producers apparently were spared. Elwood Tantum, Manager of Princeton Turf Farms, Princeton, N.J., said in early May that "So far, we haven't seen any unusual problems. We have had a cold, wet spring and cuttings are behind normal."

Air Tour in Michigan

As the reports of damage came in from Wisconsin and Illinois, a steering committee for a sod producers' organization in Michigan joined with Michigan State University to sponsor a tour of the state's farms.

WTT's editor accompanied a three-plane, nine-man party that included university turf specialists and sod producers. The group inspected, eith-



Mottled field at left, in Michigan, illustrates two problems: the extent of damage (dark spots are water from recent rain); and the difficulty of harvesting what good sod remains. Above, Dr. James Beard, squatting and gesturing, Michigan State University crop scientist, is explaining to most of the Michigan tour party what has happened. The

inspection party included Beard; Axel L. Andersen, professor in MSU's Department of Botany and Plant Pathology; Ralph Hepp and Paul Rieke, MSU agricultural economists; Donald Juchartz, Wayne County extension agent; sod producers Bob Daymon of Gregory, Bob Hozak of Fowlerville, and Ted Bosgraaf of Hudsonville; and WTT's editor.



The men in the left picture were instrumental in arranging the air-ground tour of Michigan sod farms. They make up the steering committee working toward the formation of a state association of growers. Ted Bosgraaf of Hudsonville is comparing the root system of live sod (in his right hand)



with that of grass winterkilled. Looking on is Bob Daymon, center, of Gregory, and Bob Hozak of Fowlerville. At right, Donald Juchartz, Wayne County extension agent, examines apparently healthy sod that exhibited no root system. He predicted the grass would die in a few days.

er by air or ground, some 35 to 40 farms or about 50% of the state's total acreage.

Bob Hozak, owner of Tech Center Sod Farms at Fowlerville, summed up the Michigan situation as being the "worst of three out of five bad years," the others being in 1965 and 1968.

"We've seen a little bit of everything — disease, freezing, desiccation," observed Axel L. Andersen, MSU professor in the department of Bontology and Plant Pathology. The disease, he said, probably was active last fall and is showing up this spring as the weakened grass was killed by a combination of low temperature and flooding.

One farm showed evidence of *Fusarium* blight; another fairy ring. A close inspection of one field of

apparently healthy turf revealed to Michigan's Wayne County Extension Agent Donald Juchartz that something else must have happened last fall. For some reason, the grass had grown no root system at all. Juchartz predicted that the lush leaf system would soon overtax the roots and that the plant would die.

Evidence on another turf farm supported the theory. Patches of green grass turned brown "almost overnight."

Still other growers were worrying about a more recent problem. A late April two-inch rain inundated sizable portions of farms in the Jackson, Mich., area.

"If the weather were to warm up, there would be more damage," said Beard. University experiments, he added, have shown that grass can

be water-covered for two months without ill effects when the temperature is 50 degrees or lower. "But at 80 degrees, grass was killed in 14 days," he said.

"Losing the sod is bad enough," said Bill Johnson, owner and general manager of Halmich Sod Nurseries "but plowing the dead sod is another thing. You just can't get it all plowed down, and that affects the next crop."

The "hopscotch" harvesting that will be necessary to lift good sod from a field spotted with winterkilled "could double cutting costs," said Horner.

Actual dollar loss on sod alone difficult to estimate and the loss through related costs — such as fixed overhead, higher production costs, lost wages, etc. — almost incalculable.

Price Increase Expected

Prices were expected to go up.

"Wholesale prices of 40 cents last year were expected to go up two to five cents anyway," said Warren. "With the shortage, the price could go to 60 cents or even higher. A big determining factor will be the transportation costs of bringing sod from other locations."

Horner felt wholesale prices might peak at 75 cents. "Some buyers may think we're gouging them, but

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Some evidence of disease was found, such as Fairy Ring above, but most damage was caused by a high temperature period followed by a hard freeze.

there's just no way to cover our costs."

"This kind of a loss," said Warren, "will cause a lot of us to do some thinking and investigating to see if a federal disaster loan of some kind is available and if a type of crop insurance can be obtained for future protection."

With the winterkill so widespread and coming on the heels of a bad year in 1968, Bob Daymon predicted that the Great Lakes region would feel a shortage "until the opening of the spring season in 1971."

"It will take that long for producers to regain the marketable sod acreage lost to winterkill."

Daymon, whose farm is near Gregory, chaired the steering committee of the fledgling Michigan sod producers group. He and the other members, Ted Bosgraaf of Hudsonville and Bob Hozak of Fowlerville, both producers, were instrumental in arranging the plane tour of Michigan farms.

First World-Wide Turf Meet Set July 14-17 in England

The first international turfgrass research conference is slated for July 14-17 in Harrogate, Yorkshire, England.

According to Organizing Committee Chairman Dr. James B. Beard,

the conference's objective is to establish a forum for the exchange of information on turfgrass problems, research methods and results. Some 60 world specialists are expected to attend.

Creation of a permanent organization is also on the agenda. The date and place of the next international conference will be discussed, Dr. Beard added. He is affiliated with Michigan State University's Department of Crop Science.

Conference proceedings to be published will include: turfgrasses and their improvement; soil modification and nutrition; environmental stress; turfgrass pests—weeds, insects and disease—and their control; construction and maintenance systems; and turfgrass terminology and definitions.

U. S. conference publicity director is Dr. James R. Watson, director of agronomy for Toro Manufacturing Corporation, Minneapolis, Minn. The other two organizing committee members are J. R. Escritt, Sports Turf Research Institute director at Bingley, Yorkshire; and Bjarne Langvad, horticulture director for Weibulls, Landskrona, Sweden.

ASPA Sod Field Days Open at Rutgers, Aug. 4

Two turfgrass research and development sites and a commercial turf farm will be the focal points of the third annual summer conclave sponsored by the American Sod Producers' Association, Aug. 4-6.

Activities will center at Rutgers University's College of Agriculture and Environmental Science in Brunswick, N. J.; Princeton Turf Farms in Cranbury, N. J., and the U.S. Department of Agriculture Research Center in Beltsville, Md.

A turfgrass research plots tour will highlight the Aug. 4 field day at Rutgers. Guests will inspect the internationally famous turfgrass breeding program, then attend a dinner business meeting.

On Aug. 5, the newest sod production equipment and products will be displayed and demonstrated at Princeton Turf Farms.

USDA's field day is Aug. 6 at its Beltsville research center.

Interested exhibitors should contact Dr. Henry W. Indyk, executive secretary, Rutgers' College of Agriculture, New Brunswick, N.J. 08903.

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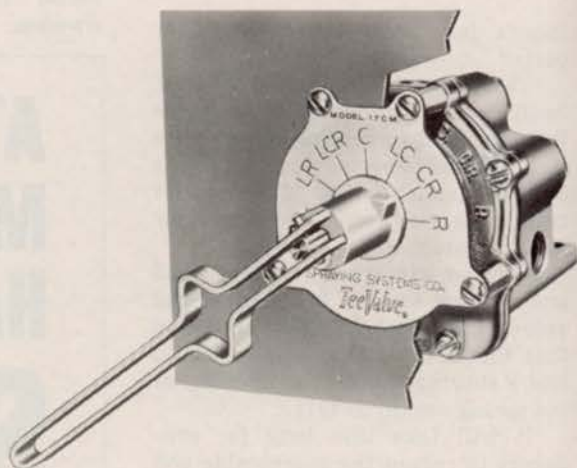
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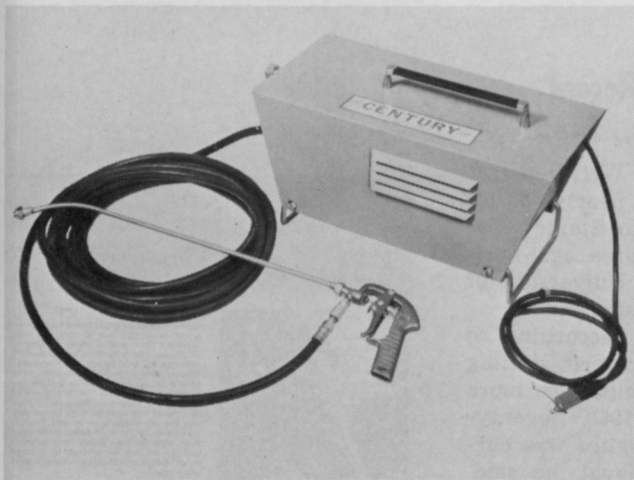


Gator Trailers Corporation, Jacksonville, Fla., now offers "The Superintendent" (Model 211), a utility trailer for removing clippings or moving sod, shrubs, bushes, etc., plus small equipment. The trailer shown at left is pulled by a golf cart (can also be towed by tractor, truck, truckster), which uses only 35% of its battery-operated power in the daily task of mowing greens, says Gator. One man can mow, dump clippings, repair ball marks and rake traps quickly and efficiently. The 1150-lb.-capacity unit is 96" long, 54" wide. For more details circle (701) on reply card.

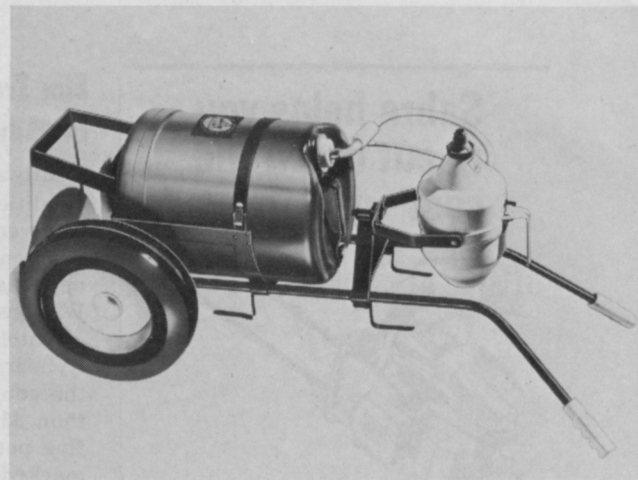
Spraying Systems Company, Bellwood, Ill., is marketing its new No. 17-CM TeeValve that mounts to tractor cab walls and provides 7 settings for complete spray control of all sections of a 3-section boom without your leaving the cab, the firm says. Control handle and face plate are located inside cab wall and valve body is outside for easy connection to liquid lines. Internal parts are corrosion-resistant plastic; body is aluminum and stainless steel. For more details circle (702) on reply card.



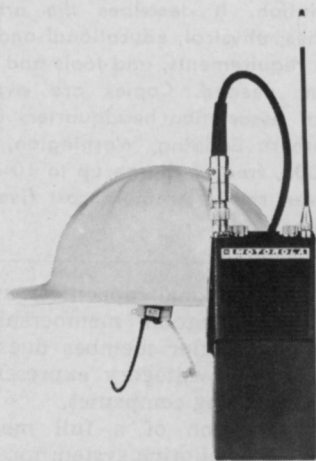
Avco Ezee Flow Division, Coldwater, Ohio, adds a 3-point hitch spinner model to its fertilizer spreader line. Ideal for spreading pelleted, granular and semi-granular fertilizers and most seeds by broadcast application or directional or band spreading, says Avco. Hopper holds more than 11 bushels of material and spreads from 13 to 1600 lbs. per acre in a uniform pattern up to 30 ft. wide. Hopper bottom is divided, each section having an agitator and adjustable metering gate that feed material to the twin spinners. For more details circle (703) on reply card.



Century Engineering Corp.'s HPW-3 "Scotty" Washer draws cleaning solution from 55-gal. drums at 2 GPM, delivers 500 lbs. pressure. 3-way control lets you apply solution, rinse and refill drum with water. Handgun and 30' hose included. For more details circle (704) on reply card.



Hub States Chemical and Equipment Corp., Indianapolis, offers Roll-About Electric Sprayer with 5-gal., polyethylene tank that removes for cleaning. Unit discharges mist spray from 1.8 to 5.3 GPH, residual spray from 6 to 14 GPH. For more details circle (705) on reply card.

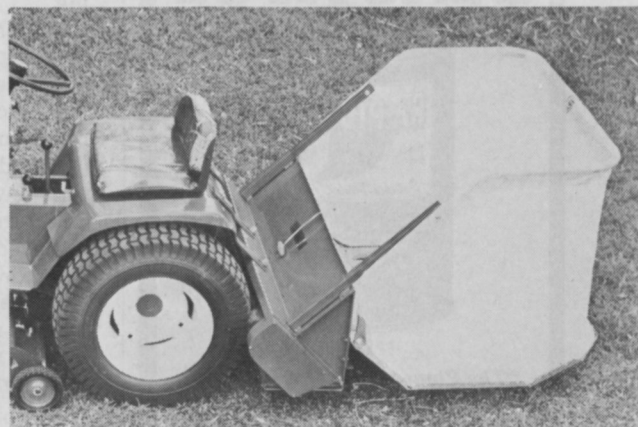
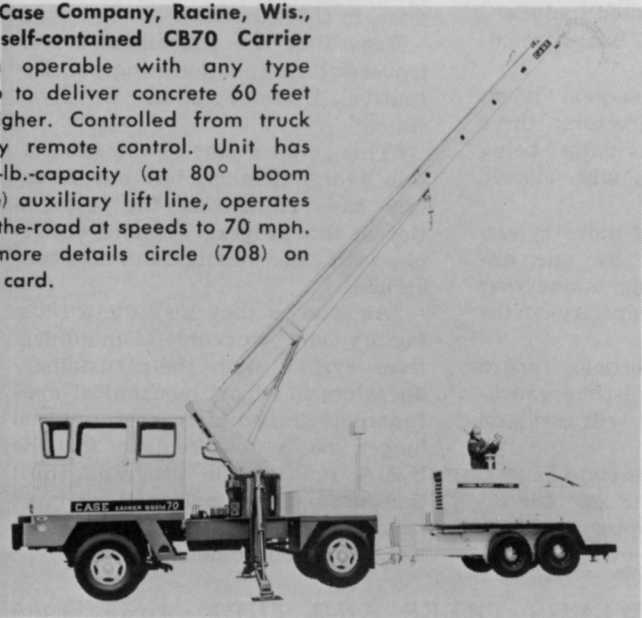


Motorola Communications & Electronics, Inc., Chicago, makes available non-incendive Handie-Talkie 2-way radios safe to use in hazardous atmosphere of oil, gas, chemical, mining, etc., industries. For more details circle (707) on reply card.



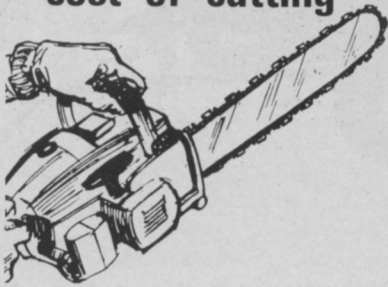
Clark's truck-mounted sprayer has 1000-gal., stainless steel tank with rubber-lined saddle. Full-length sparging tube is welded to tank bottom for agitation. Model U-37, 10-row channel boom shown has 1" hose, resists corrosion. Choice of engine and pump units. Shown is 7 H.P. Wisconsin engine with M.P. (flomax 10) 180 GPM centrifugal pump. Accommodates most fertilizer solutions, mixed, liquid and suspension materials, says Clark's. For more details circle (706) on reply card.

I. Case Company, Racine, Wis., has self-contained CB70 Carrier boom operable with any type pump to deliver concrete 60 feet or higher. Controlled from truck or by remote control. Unit has 1000-lb.-capacity (at 80° boom angle) auxiliary lift line, operates over-the-road at speeds to 70 mph. For more details circle (708) on reply card.



Fort Myers Iron Works, Fort Myers, Fla., makes available Litter-Whisk attachment for Wheel Horse tractors. Unit is 37" wide, whisks up 15 bushels of cuttings, leaves (even wet ones), pine needles, paper, etc. Tractor-mounted, it simplifies dumping and maneuverability. Hopper can be emptied from driver's seat. For more details circle (709) on reply card.

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RAPID-GRO

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Elm Tree Losses a Record In Milwaukee, Wis., Area

Milwaukee County, Wis., elm tree fatalities soared to nearly 35,000 last year, according to Stanley Rynearson, Milwaukee area agri-business agent for the University of Wisconsin extension service.

Dutch elm disease, according to Rynearson, was the culprit, costing the county and municipalities more than \$1.6 million in 1968. Seventy-five percent of this figure was earmarked for tree removal, he said.

Of the 26,017 replacement trees planted last year, 64% were maple, a lower ratio than for previous years. Also, the extensive elm loss has deterred several municipalities' plans for further comprehensive control, Rynearson continued.

It is believed that this year's absence of DDT from control recommendations will hamper additional control efforts. Despite the heavy elm tree losses, Milwaukee County still has some 240,000 elms, Rynearson reported.

Of the \$1.6 million cost figure cited by Rynearson, nearly \$949,000 was borne by the city itself, the remainder having been paid for by the suburbs and county. These figures included tree removal, disease control, and elm tree replacement costs.

Board Okays Bylaw Changes For Helicopter Association

Directors of the Helicopter Association of America have ratified by-law changes requested by the membership at the January annual meeting.

Action came at a May board meeting in Vancouver, B.C., Canada. Changes incorporated include:

1. Increase elected board members from six to nine.
2. Adoption of three-year terms for newly elected directors; three directors to vacate annually, being replaced by three newly elected directors.
3. Representation of industry airframe manufacturers by one ex-officio member serving a one-year term in an advisory capacity to the board.
4. Permanent ex-officio board membership of the full-time executive director, who also will serve on all committees.
5. Elimination of associate Class C membership. Corporate or individual commercial helicopter or STOL equipment operators—in either bus-



NATIONAL ARBORIST ASSOCIATION

Career Opportunities in Tree Care



DESCRIPTIVE INTRODUCTION

Man's concern for the care of trees and shrubs is expressed through the work of many men called "arborists." These arborists practice a series of horticultural skills in the care of trees and shrubs by performing the tasks involved with transplanting, fertilizing, spraying, pruning, and removing. An arborist is also called upon for other specialized tree services such as consulting. The National Arborist Association has prepared this information so people are becoming more conscious of the value of shade trees and their relation to an increased interest in beautification everywhere—highways, clinics, downtowns, parks, and home grounds. Trees and shrubs need the care that can be offered by a trained arborist, and the opportunities for a career in arboriculture are good.

DUTIES OF THE ARBORIST

Shade and ornamental trees are an indelible part of the plan to make our country more beautiful. The arborist is called upon to design and follow through with tree plantings. This requires consideration as to the type of tree needed for the particular environmental conditions and the execution of properly transplanting the trees to the new location. How trees are planted each year. In a few years, the small trees planted now will be big trees requiring the services of a trained arborist.

This new tree care brochure has been released by the National Arborist Association. It describes the arborist's duties, physical, educational and training requirements, and tools and equipment needed. Copies are available from Association headquarters at 700 Southern Building, Washington, D. C., 20005, free of charge up to 10 copies. Eleven copies or more cost five cents apiece.

iness or personal capacities—are eligible for regular membership involving regular member dues payments. This category expressly excludes leasing companies.

6. Adoption of a full membership mail balloting system for major projects and elections of directors. New ballots include provision for membership write-in candidates.

All first-year regular members' dues continue at the \$100 flat rate. Thereafter, dues entail the flat rate plus \$20 for each aircraft, to a maximum of \$260. International members outside the western hemisphere also pay \$100 annual flat rate dues, in U.S. currency.

Regarding the Association's controversial malfunction program, Executive Director John E. Ryan stated:

"This is not a part of the Association reorganization, but our directors have ruled that the termination of this program remains entirely with the manufacturers concerned.

"As soon as they institute a satisfactory and workable communications system with their customer/operators to report mechanical malfunctions immediately, there will no longer be a requirement for the H.A.A. malfunction program. Until that time, these malfunctions must be reported to all members regardless of the equipment operated."

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" 10¢ per word, minimum \$3.00. All other classifications 20¢ 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.

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FOR SALE—Sod Farm—160-acre sod farm, 100 acres muck in sod, rest is mineral soil. In Ingham County. Phone 313 662-9398.

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7 GANG Roseman mowers, rebuilt, \$1,295.00; separate mowers, \$150.00 each; 32' tandem flat bed trailers, as is, \$300.; OC 6 crawler with hydraulic, \$2,200; MD-IHC with loader, \$700.00; tilt top trailer with winch, \$250.00; Quickway backhoe on 4x4 truck, as is, \$350.00; 6x6 GMC tractor, large tires, \$650.; ½ tracks for Ford, \$150.00. Ellis Foulkes, Fall River, Wisconsin 53932. Phone: 414 484-3941.

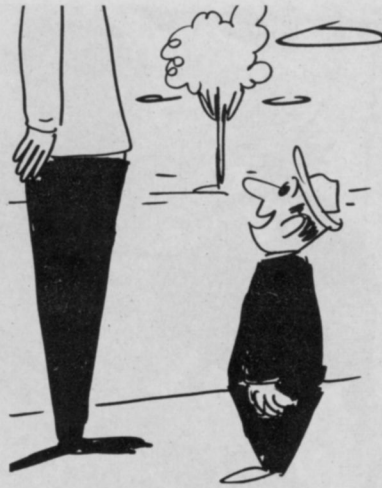
50 FT. HI RANGER with dump box on 1965 International, excellent shape. Write: Paulson Tree Service, 12242 Cliffwood, Garden Grove, California 92640.

HELP WANTED

WORKING FOREMAN for sod farm. Top wages and percentage, or would consider land lease. Ellis Foulkes, Fall River, Wisconsin 53932. Phone: 414 484-3941.

BUSINESS OPPORTUNITIES

FOR SALE—Active Tree Business—Connecticut, New York. J. R. Krapowicz Tree Experts, New Canaan, Conn. 06840. Phone Pound Ridge 4-5002.



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Oregon State Accelerates Testing of New Herbicides

In an effort to speed up the development and safe use of effective herbicides, Oregon State University researchers are involved in a fast-paced program of evaluating new herbicides.

Fifty-one chemical companies from the United States, England, Germany, Switzerland, Japan and France—producing new chemicals at the rate of 150 per year—are cooperating.

The program's intent is to bring together all new herbicides produced by the world chemical industry that are still in an early stage of testing. The chemicals are then

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compared under as many conditions and on as many crops and weeds as necessary to adequately assess their potential.

By testing herbicides in Hawaii and South America, in addition to Oregon, researchers can obtain three seasons of information in one year. The program hopes to reduce by a year or more the time it takes for a promising chemical to become available on the market. Currently it requires five years or more.

No secrets are kept on any findings . . . information is available to anyone, say program director Dr. W. R. Furtick, Oregon State Professor of Farm Crops, and his assistant, L. C. Burrill.

Industry People On the Move



Rain Bird Sprinkler Manufacturing Corporation, Glendora, Calif., appoints H. Gary Underhill vice-president of marketing. He had been hardware sales manager and market development manager since 1964.

* * *

Ansul Company, Marinette, Wis., announces the appointments of Dr. O. V. Luke as director of research and Jerome A. Hagen as director of development. Luke had been retained as a consultant for the past six months. Hagen takes on additional responsibilities in the area of fire protection.

* * *

Morton Chemical Company, a division of Morton International, Inc., Chicago, names Terrel W. Mayberry a field development representative in its agricultural chemical division. Mayberry was formerly employed by Chevron Chemical Company in Fresno, Calif., as a research specialist.

Diamond Shamrock Corporation, Cleveland, Ohio, welcomes Dr. James A. Winchester to its research department as a senior field specialist. He will supervise the corporation's Florida research farm operations in Boynton Beach.

* * *

International Harvester Company, Chicago, appoints Charles L. Walker general supervisor of advertising of its farm and industrial equipment. Beginning his career with International Harvester at McCormick Works, Walker joined the advertising department in 1963 after a variety of assignments in industrial relations and with the firm's Harvester Central School.

* * *

Velsicol Chemical Corporation, Chicago, appoints three new regional managers for its agricultural division. G. Quentin Brown becomes Midwest regional manager with offices in Omaha, Neb.

Eugene Taylor, new Northeast regional manager, will be located in New York City. He was formerly national sales manager of agricultural chemicals at American Oil Company.

Philip Snow becomes Southern regional manager, with offices in Houston. He moves from Kansas City, Mo., where he was manager of the country operations division of Bartlett & Company.

Gulf Conducting Research On 'Time-Pill' Fertilization

A single feeding which could nourish plant growth for several years is being researched by Gulf Oil Corporation's Harmarville, Pa. subsidiary.

This "time-pill" research is known technically as encapsulation, or coating of fertilizers and plant foods. These are suspended in a wax coating with additives for soil distribution in powder, structural and "stick" form. Water gradually releases the nutrient from the coating, so that the plant receives a continuous, "sustained release" feeding.

Gulf scientists envisage encapsulation in all planting activity—timbering, forestry, pesticide and herbicide application, and even in prolonged feeding of aquatic pets.

Gulf scientists examine results of a wax encapsulation experiment for fertilizing and feeding plant life. The nutrients are released gradually as the plant is watered. The beaker in the foreground contains various forms of wax encapsulations.



Weed Society Announces Three Policy Changes

Decisions affecting Weed Science Society of America members were made recently by the Society's executive committee, according to F. W. Slife, business manager.

The decisions include publishing the *Weed Science* journal six times annually instead of four. The anticipated bimonthly schedule is January, March, May, July, September and November. The purpose is to shorten the time between paper submission and printing. The change becomes effective beginning with Volume 17 in 1970.

Page rates will go from \$10 to \$20 per page, effective for all manuscripts submitted on or after Aug. 1. Those who cannot obtain page charge payments approval from their employers are asked to contact Slife.

Also, beginning with 1970, Society membership fees will be raised from \$10 to \$12 per year, and subscription rates will increase to \$15. Graduate student membership fees will remain at \$5.

Insect Report

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



TURF INSECTS

A BILLBUG

(*Sphenophorus venatus vestitus*)

CALIFORNIA: Adults of this and *Sphenophorus phoenicensis* light in lawn turf at Anaheim, Orange County.

SAY STINK BUG

(*Pitedia sayi*)

NEVADA: Adults medium on range plants, especially *Stanleya* sp., in Clark County.

INSECTS OF ORNAMENTALS

SIX-SPOTTED MITE

(*Eotetranychus sexmaculatus*)

FLORIDA: Eggs and adults moderate on 850 of 1,000 azalea plants at Mango, Hillsborough County.

ARMORED SCALES

CALIFORNIA: *Hemiberlesia lataniae* heavy on evergreen pear on hospital grounds at Santa Maria, Santa Barbara County, and *Aspidiotus nerii* (oleander scale) heavy on *Cycas* sp. nursery stock at San Diego, San Diego County. *Lineaspis cupressi* heavy on juniper nursery stock at Torrance, Los Angeles County.

A WEEVIL

(*Rynchophorus cruentatus*)

FLORIDA: Continues problem on Canary date palm in nursery at Homestead, Dade County; controls used.

TREE INSECTS

A CONIFER APHID

(*Cinara* sp.)

WISCONSIN: Eggs unusually heavy on red pine needles at Western Dane County site.

EASTERN TENT CATERPILLAR

(*Malacosoma americanum*)

OKLAHOMA: Third instars on wild plum in Noble, Payne and Mayes counties. First report of year. MISSOURI: Hatching on wild cherry in Phelps County. OHIO: Hatch expected about Apr. 25. VIRGINIA: On wild cherry in lower Nansemond County.

AN OLETHREUTID MOTH

(*Epinotia subviridis*)

CALIFORNIA: Larvae heavy on cypress trees at Laguna Beach, Orange County.

RED-HEADED PINE SAWFLY

(*Neodiprion lecontei*)

FLORIDA: Outbreaks begun late last fall still continuing at Tennile, Steinhatchee, and Keaton Beach in Taylor County. About 100 acres of 2- to 8-year-old commercial longleaf pines involved. Killed 500 8-year-old trees; damage still being evaluated; defoliation followed by attacks of *Ips* sp. (an engraver beetle) and *Pissodes* sp. (a weevil) in dry weather. *N. lecontei* eggs to fourth instars heavy on more from 600 acres of year-old slash pine. *N. lecontei* and secondary infestations of probably *Pissodes nemorensis* (deodar weevil) killed 1000-year-old slash pines in 1968. Infestations total more than 1000 acres.



Trimmings

CAN YOU ALWAYS capitalize on a good reputation? Hank Schmid, advertising manager for The Davey Tree Expert Company, Kent, Ohio, isn't so sure. He tells that famous author John Steinbeck, in his book of a few years ago, "Travels With Charlie," begins a chapter by writing that his dog, Charlie, was becoming quite a tree expert. In fact, he claimed Charlie "could probably get a job as a consultant with the Davies people."

"We would like to think he meant the Davey people," said Schmid, "but even if he did, we're not sure what to say about it."

A QUESTION concerning another name came up after the recent plane tour of Michigan sod farms damaged by winterkill. Producers were on the verge of forming a state association, and Bob Hozak of Fowlerville was asked what the new organization might be called.

"Right now," he replied, "the appropriate name would be the Michigan Sad Producers."

WHILE WE'RE ON NAMES, you'll note another staff change on the contents page. Kathy Thomas, editorial assistant for a little more than a year, left Harvest Publishing Company May 1 ostensibly to go to California. She got only as far as St. Louis, where she married banker Richard Illyes on May 3.

AND A FELLOW named Robert Finch, U.S. Secretary of Health, Ed-

ucation and Welfare, says the average person has a concentration of DDT in his fatty tissues of about 12 parts per million. The government confiscates foodstuffs if the amount exceeds 7 parts per million, he adds.

So keep in mind that you are unfit for human consumption . . . in case a cannibal should ask.

* * *

MUCH OF THE CAMERA supplies we purchase to take pictures for this magazine come from the Eastman Kodak store here in Cleveland. We deal with the camera supplies representative whose name is Henry P. Flash.

Weeds May Be Detected By Infra-Red Photography

Infra-red photography may soon be used to detect weed infestations from the air, reports Dr. J. R. Orsenigo, a horticulturist with the University of Florida's Everglades Experiment Station, Belle Glade, Fla.

Orsenigo says that ground and aerially exposed conventional and infra-red color photography have been compared in weed science applications with agronomic and horticultural crops and weeds. Gradations in plant response can be noted, but the effect of background color on infra-red film may hinder evaluation, he reveals.

Simultaneous paired exposures of conventional and infra-red color films may be needed for optimum information in weed science, he concludes.

Private Property Offers Sanctuary for Sick Trees

Kansas City, Mo., lost more than 4100 street and boulevard trees to Dutch elm disease during 1968, the highest number of such "fatalities" since 1964, it was recently reported to the city's parks and recreations board.

The increase was attributed to lack of city authority to remove diseased trees on private property.

Attempts to get such legislation in the past have "fallen on very deaf ears in Jefferson City," according to Herbert Brackney, chief planner for the department. However, with the revelation that the spread of DED through connecting root systems was particularly noticeable in Kansas City last year, a new effort that may reach the Missouri Legislature is currently being prepared, it was reported.



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