



New officers of the Southern Weed Science Society are, seated, from the left: President-elect—J. N. Orsenigo, Belle Glade Experiment Station, Belle Glade, Fla.; president—D. D. Boatright, Horne-Boatright Chemical Co., Birmingham, Ala.; and vice-president—T. J. Hernandez, Du Pont Company, Houston. Standing: Past president—J. B. Baker, Louisiana State University, Baton Rouge; executive board member—W. L. Lett, Colloidal Products Corporation, Memphis, Tenn.; executive board member—W. D. Hogan, Chevron Chemical Company, Orlando, Fla.; secretary-treasurer—P. W. Santelmann, Oklahoma State University, Stillwater; and editor—A. D. Worsham, North Carolina State University, Raleigh. Also named to the executive board, but not pictured, were James F. Miller, University of Georgia Cooperative Extension Service, Athens, G. A. Buchanan, Auburn University, Auburn, Ala.; and J. S. Baker, Delta Experiment Station, Greenville, Miss.

disease increase and later invade the developing crop.

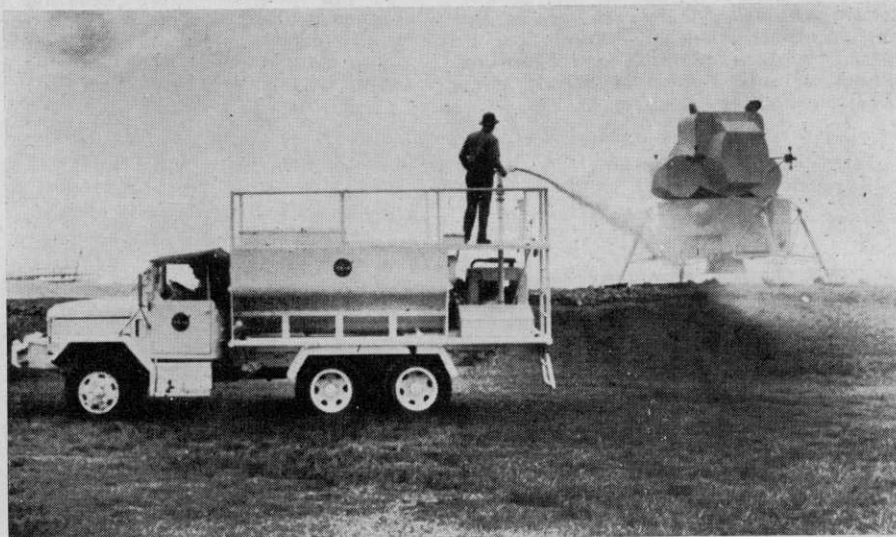
The role of weed control for this purpose, Furtick continued, is almost universally unexplored in relation to most crop pests. What are the weed species that host major insect and disease pests? What distance of weed-free barrier is needed to prevent the spread from weeds to crops of the individual species

involved? These and a host of other similar questions are perhaps some of the most important questions that need answering.

Another example of interdisciplinary failure, Furtick said, has been the concentration on fertilizer introduction around the world with, in many cases, little, if any, thought of the impact on weeds and weed control.

In most areas of the world, there has been a rapid trend toward urbanization. This is often creating decreased labor availability on the farm. The rapidly increasing use of fertilizer is changing the kinds of weeds that dominate the rapidity of their development and their aggressiveness in relation to the crops. Often adequate control requires a substantial increase in weeding labor at a time the supply is dwindling.

This problem has been solved in the United States by rapid introduction and use of pre-emergence and other herbicides and high levels of mechanization. The heavy use of herbicides as a substitute for hand labor and some of the traditional cultivation practices is already giving evidence of causing rapid shifts in the primary species of importance in our fields. This is another good example of dynamic weed ecology. The shift that is occurring is away from the annual species such as *Digitaria*, *Setaria*, *Echinocloa*, *Elusine*, *Amaranthus*, etc., with a take over of the more difficult perennial species such as *Cyperus*, *Sorghum*, *Convolvulus*, and perennial *Panicum*. The problems being created may be much more costly to handle than those originally solved.



ARE THEY PLANTING GRASS ON THE MOON? Not at all — but this spray-planting Bowie Hydro-Mulcher is typical of the modern NASA equipment used in turfing and maintaining the grounds including the slope shown left, which borders the edge of the acreage devoted to the simulated lunar surface.

The Bowie Hydro-Mulcher gives what many call "instant green." Actually, the Hydro-Mulcher sprays a combination of seed (or sprigs), fiber mulch, fertilizer, color additive, and water simultaneously, so as to cover barren ground on steep slope, rolling or flat surfaces and provides what agronomists call excellent conditions for fast healthy turf growth.

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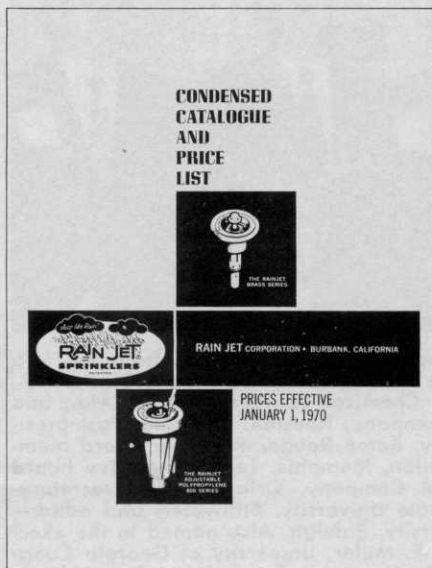
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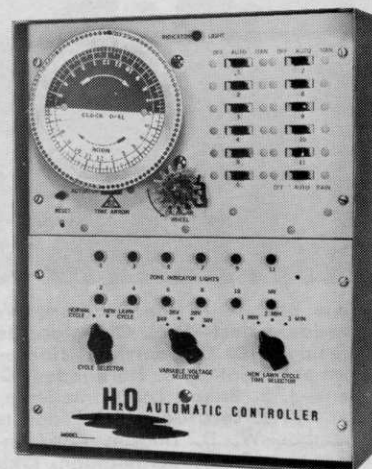
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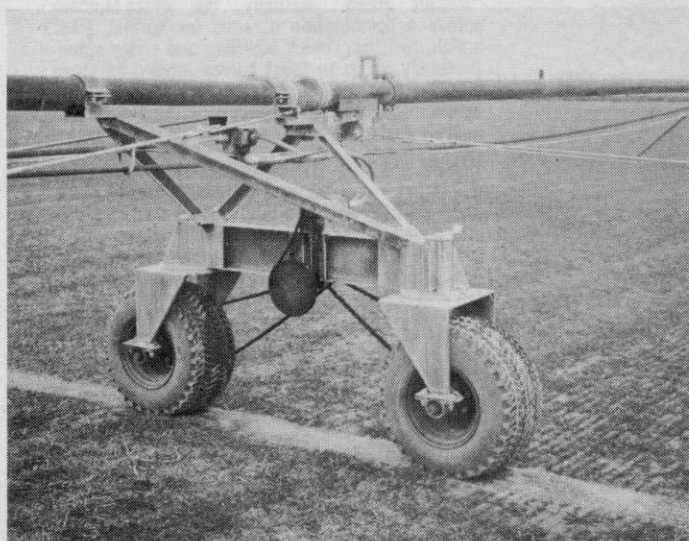
The Leisure Group, Inc., Pasadena, Calif., has added to its Thompson line for 1970 six Rain Pulse impulse sprinklers with coverage up to 80 feet in diameter. Made of die-cast metal for long life, the sprinklers are available on horseshoe bases, spikes or without bases. All have rugged brass heads. Rain Pulse No. 800 (lower left) is fully adjustable to water any portion of a circle. The same head is available in other models on an 8-inch spike, or without any base as a replacement on existing sprinkler or underground systems. Rain Pulse No. 802 (lower right) provides full-circle coverage only. Model No. 820 (upper left) and Model No. 822 (upper right) are shown mounted on the 8-inch spike. In addition to the Thompson sprinklers, The Leisure Group, Inc., manufactures Hayes spray guns, Rain Spray sprinkler systems and Black Magic house plant products. For more details, circle (701) on the reply card.



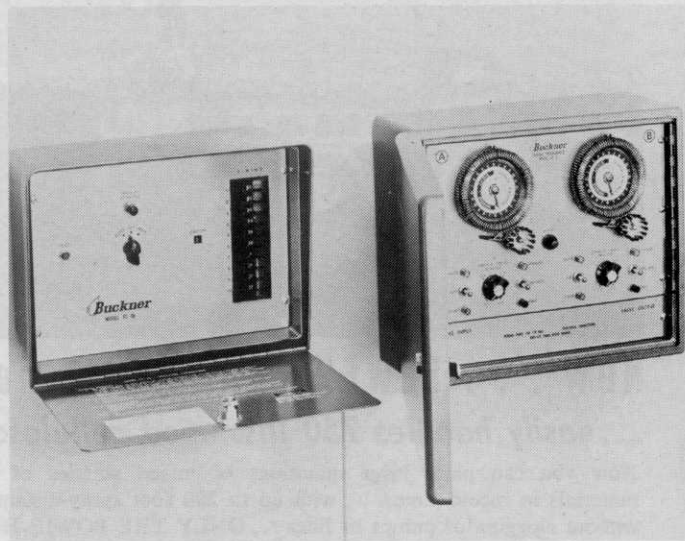
Rain Jet Corporation, Burbank, Calif., is now distributing a new Condensed Catalogue and Price List. It gives specifications, engineering data, ordering information and prices on its line of Rain Jet underground sprinkler system materials. The eight-page Catalog and Price List is divided into six sections. Section 1 gives all necessary facts on Rain Jet brass sprinklers with castings. Section 2 covers Rain Jet sprinkler nozzle units without castings, and also shows accessories. Section 3 lists Rain Jet adjustable polypropylene sprinklers with castings. Section 4 groups information on Rain Jet flexible pipe, fittings, valves and sediment separators. Section 5 shows the line of Rain Jet'er portable sprinklers on stands. Section 6 gives general information on terms, freight allowances, and other conditions of sale. For more details, circle (702) on the reply card.



American Granby Co., Milford, Conn., has disclosed deluxe features of its Harvard 700 Series H₂O Irrigation Controllers. A timer dial permits the user to select day or night programming. A re-set button protects system from overload. Normal cycle or new lawn cycle may be dialed by the cycle selector switch. The user may omit half-days or entire days from the watering cycle by programming the calendar wheel. Individual zone switches permit selection of zone to be watered and whether the zone should be watered automatically, manually, or not at all. Individual zone lights indicate zone being watered. A rain switch may be activated to stop controller from watering automatically. Duration of watering can be controlled by the time selector switch. For more details, circle (703) on the reply card.



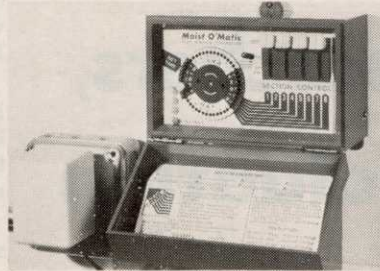
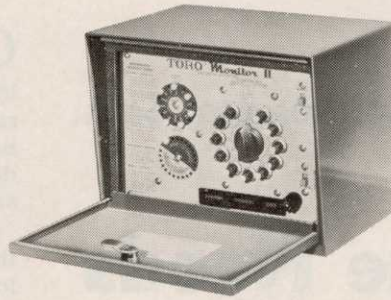
Maxey Manufacturing Co., Fort Collins, Colo., announces a circular central pivot model sprinkler for sod farm acreages. The unit is in use in the Rocky Mountain region. The machine is low to the ground and pivots around a central point, covering 40 to 60 acres, depending on size. It can make a complete circle in 2½ to 3 hours, or be slowed to make a complete circle in 12 hours or longer. For more details, circle (707) on the reply card.



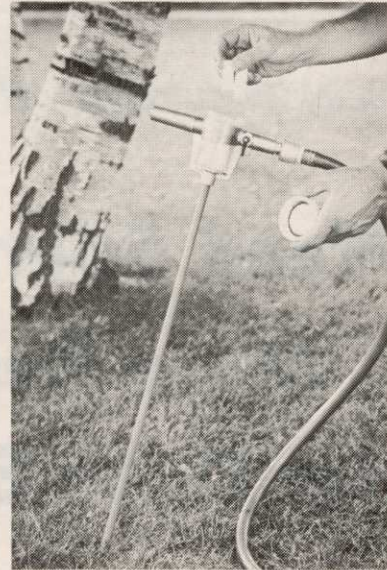
Buckner Sprinkler Co., Fresno, Calif., announces a new central programmer. The Model CP-2, giving complete control of watering from a single location, can be installed for manual, automatic or semi-automatic operation. It has a 14-day programmed irrigation cycle. The unit features independent dual control panels, each capable of operating up to 30 field controllers. Each field controller may have up to 11 sprinkler stations or more. For more details, circle (708) on the reply card.



Columbine Products Co., Longmont, Colo., offers a device to tell when and how much to water. Sprink-L-Guide is a small portable soil moisture tester that uses a nine-volt transistor radio battery for power. The complete unit weighs 1½ pounds, including battery. It will measure moisture to 10 inches below the surface. When the probes are pushed into the soil, a small current flows between the probes and is registered instantly on the meter. The more moisture present, the higher the reading. The instrument dial is graduated from one to ten. A needle reading up to six indicates water is needed. The case measures 3¼x6½x2 inches. The unit is \$13.95 postpaid, including battery and instructions. User may return within 10 days for complete refund if dissatisfied. For more details, circle (704) on the reply card.



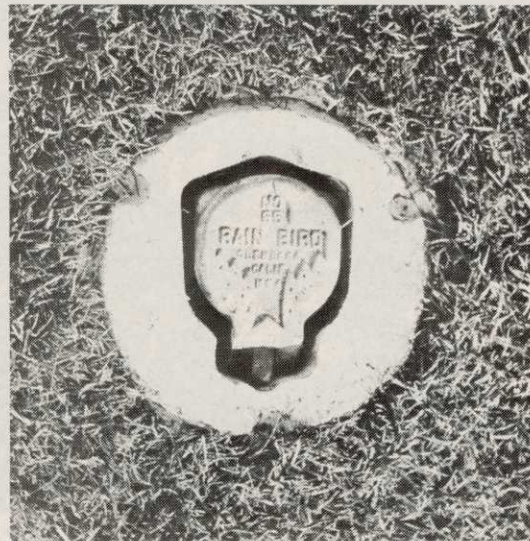
Toro Manufacturing Corporation, Minneapolis, Minn., has announced two new irrigation controllers. Its Monitor II electric controller (above) is designed to handle total residential or industrial landscape irrigation. The new controller features dual control, meaning shrubbery and flower beds can be put on a different watering schedule than the lawn. The Monitor II has a 14-day calendar programmer. Monitor II is available in 11- and 23-station models and features variable time settings from 0-60 minutes for each station. An eight-station electric controller (below) is available for residential and small commercial installations. It has variable timing from 0 to 30 minutes for each station, making possible a complete watering cycle of up to four hours. For more details, circle (705) on the reply card.



Ross Daniels, Inc., West Des Moines, Ia., offers a new model Ross Root Feeder that makes it easier to get plant food, or systemic insecticide cartridges to the roots of trees, roses and shrubs. The larger chamber that holds four or five cartridges at one time, and the fact that refilling the chamber does not require disassembling, enables heavier feeding and faster feeding. Other new features include a double hand grip for easier insertion into the soil; a hand knob for control of water flow; and faster solution of cartridges. The built-in, anti-siphon check valve will be included to prevent any of the solution from possible back-up into the water supply line. The unit, including plant food and insecticide cartridges with complete instruction manual sells for \$9.95. For more details, circle (706) on the reply card.



Arps Corporation, New Holstein, Wis., has added a 6 hp self-contained, portable trencher to its line of Trench Devils. The Model 750 digs trenches for a number of purposes, including sprinkler systems. It digs to a depth of 18-24 inches in widths of 2½-3½ inches. Chain teeth are carbide-tipped. A self-locking boom maintains constant digging depth. Operated by one man. Can be transported in back of station wagon. For more details, circle (709) on reply card.



S. L. Enterprises, Penfield, N.Y., offers a protector for irrigation heads. SAVTRIM heads are safe from mower damage, prevent grass encroachment, have phosphorescent coating for night location. Installed with standard 8" sod cutter. Comes in various sizes, for both fairway heads and tee heads. For more details, circle (710) on the reply card.

New Products Especially for Irrigation

To Pacify 'Naturalists,' WSSA President Says

Weed Science Needs More Researchers, Better Data Evaluation

CURRENT ATTACKS on chemicals are just another outburst in the long and unending war that "naturalists" have waged against technology, believes Glenn G. Klingman, director of plant science, Eli Lilly and Company.

Klingman, outgoing president of the Weed Science Society of America, said in his presidential address that "many of these same people were opposed to fluoridation of public water and to vaccinations."

But do not take their attack lightly, he cautioned, for they are being heard via newspaper, radio, television, and "uncertain government edicts."

The danger that has developed, he said, is that constant reports of this nature are no longer taken seriously.

"Wolf has been cried so often that if a real wolf were to appear, we might pay no attention until it was too late.

"In some manner, we must learn to separate the important problems from those of little or no consequence."

It is good that we have all sorts of scientists and research centers, he continued, "however, the real problem exists in properly interpreting their results, as they relate to the prediction of hazard to humans and to their environment.

There are no real naturalists, contends Klingman. Some claim to want "natural foods" produced by "nature's wisdom" in a "balanced

G. C. Klingman of Eli Lilly & Company, Greenfield, Ind., addresses the 10th annual meeting of the Weed Science Society of America. Klingman has been president the past year. Nearly 600 persons journeyed to blustery and frigid Montreal, Feb. 2-5. Next year's meeting will be Feb. 9-11 in Dallas.



nature" and an environment "free of technology," he said.

Yet they do "unnatural things" such as getting up at seven in the morning, driving a car to work, earning and saving money to buy food that is preserved by cooking or refrigeration.

"They have no interest," charged Klingman, "in returning to a nature balanced by hunger, malnutrition, diseases, insects, vermin and a forbidding and often hostile environment.

"When the naturalist goes to the doctor, he hopes the doctor's technology can shift the balance of nature in his favor."

Klingman admitted there were problems of pollution and scars of technology. But the answer isn't to diminish technology; rather, it is through further application of technology.

Better Training and Evaluation

"My plea is for greater training of scientists, who are capable of undertaking the needed research and of making appropriate interpretations and judgments of relevance to man."

The world-wide detrimental effects of weeds of all kinds are well-documented and recognized, he said. But apparently the need for in-depth and well-rounded weed control education and research is not recognized by our educational system.

"For years, I have not understood, nor do I now understand the lack of enthusiasm for weed science on the part of College of Agriculture administrators," he stated. "There is not a single Weed Science Department at a Land Grant College."

Klingman issued the challenge to his listeners to read the Biblical parable of the talents, Matthew 25:15-30. "Professional talent in weed science has been 'hid in the earth' about long enough," he asserted.

"There is nothing to indicate that the public needs protection from herbicides as they are labeled and used. There is evidence of a positive and unmistakable interest in the proper development and proper use of herbicides as a part of a total weed control program."

Nature's Herbicide

But the naturalists could claim a moral victory as the nearly 600 weed scientists gathered in Montreal, Feb. 2-5. As they discussed weed control problems and achievements from every aspect in the

warmth of the Hotel Queen Elizabeth, undoubtedly the most effective herbicide raged outside—the work of Nature—a blinding blizzard and frigid 15-degree-below-zero temperature.

Nevertheless, WSSA members asked, through resolutions, that scientific data rather than whims of nature or politicians be the basis for making decisions regarding pesticides and herbicides.

Members asked that all levels of government first collect data from government, industry and educational institutions and evaluate it thoroughly before publicly announcing restrictions.

The Secretary of Agriculture was asked to add a weed specialist to his staff for advice on policy-making.

The legislative committee recommended that WSSA establish active liaison with the legislatures of each state.

Officers and Awards

L. L. Danielson, Weed Investigations, Horticultural Crops, Agricultural Research Service, USDA, was elected WSSA president for 1970.

Other officers are: President-elect—D. L. Klingman, Plant Industry Station, Beltsville, Md.; Vice-president—R. P. Upchurch, Monsanto Company, St. Louis; Secretary—Arnold P. Appleby, Department of Farm Crops, Oregon State University; treasurer and business manager—F. W. Slife, Department of Agronomy, University of Illinois; Editor of Weed Science—E. G. Rogers, Department of Agronomy, University of Florida.

Honorary Fellows, a new award this year to recognize outstanding contributions to weed science, were presented to Dr. Warren C. Shaw and Dr. Fred W. Slife. The award for the outstanding paper went to Dr. J. D. Weber of North Carolina State, for his paper, "Adsorption of Triazine Components on Organic soils."

Papers and addresses at this 10th WSSA meeting approached the 200-mark. Most were related to the agricultural crop field, but a significant portion dealt with non-crop vegetation, principally rights-of-way maintenance and aquatic weed control. Sketches of some papers follow, while others will be presented in greater detail in later issues.

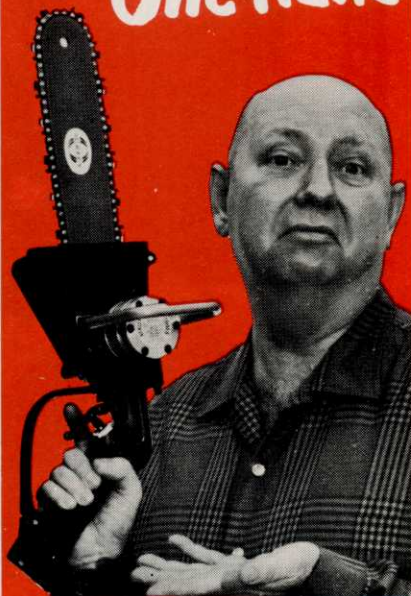
Aquatic Herbicide Data Lags

Industry is running the risk of losing these herbicides for aquatic use, warned Charles R. Walker of the Interior Department's fisheries



Close to 200 papers and addresses were delivered, with news releases available on many of them. F. A. Holmes, right, chairman of the public relations committee, and Leavitt S. White, both of the Du Pont Company, mark a program to indicate which sessions are covered by advance releases. Several presentations were reproduced by a duplicating machine in the press room.

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division. And he named:

Ammate, Copper Sulfate, Dichlone, 2,4-D, Diuron, Monuron, Petroleum Solvents, Silvex, Sodium Arsonite, 2,4,5-T and Xylene.

He named these compounds because no requests had been received from manufacturers asking for an extension of use until research data are complete enough to serve as a basis for establishing new tolerances.

"Industry has had fair warning that these registrations would expire," said Walker. Yearly extensions have been required since 1967. In the absence of extension requests for the current year, a notice of cancellation "could come at any time." Automatic cancellation will come effective Dec. 31, 1970.

It is imperative that industry get its data filed with the appropriate federal agencies, stressed Walker.

"The privilege of using a chemical is going to become indeed a privilege. These materials are going to be scrutinized much more closely."

While proponents of the major approaches to aquatic weed control—mechanical, chemical, biological, physiological and combinations, thereof—stated their case, the consensus seemed to develop that the total water management concept shows most promise. These thoughts developed as to what needs to be learned or tried:

—The target problem must be pinpointed then dealt with. One plant might retard the growth of another. Eliminate it and a worse problem could develop. Or an acceptable plant might be encouraged to compete with an undesirable species.

—Generally, more needs to be known about the genetics of aquatic plants.

—Better materials are needed, ones developed specifically for aquatic weed control, to replace the "dressed over" agricultural crop chemicals.

—Research is needed to discover how to control nutrient intake. Or perhaps techniques can be employed to tie up basic nutrients, such as phosphorus. Because the absence of trace elements can drastically affect plant growth, this avenue should be explored.

—Harvested aquatic plants perhaps could be utilized as feed, or in some manner to offset the cost of this weed control method.

Pellets, Beetles and Beans

Imagination already has worked overtime in searching for new directions in aquatic weed control. Reports covered efforts with herba-



Mrs. Ivy Wile would be delighted to chat with you—about the "Ecology of Vascular Aquatic Plants in Small Lakes and Ponds in Southern Ontario." That's the name of the paper she presented at the WSSA aquatics division. She works for Ontario's Water Resources Commission and Department of Lands and Forests.

ceous fish and insects, herbicide-impregnated plastic pellets and laser beams. Here are some findings:

—2,4-D impregnated polyvinyl chloride pellets (2,4-D n-butyl ester) was tried as a control of Eurasian Watermilfoil. Laboratory tests indicate that the controlled-release method of dispersing herbicides was effective at low dose rates. Dosages as low as 3 ppm, based on 100% immediate release, produced toxic effects in 48 hours. All test plants were dead within two weeks. M. A. Lawson, U. S. Army, Edgewood Arsenal, Md.

—Helicopter applications of granular 2,4-D at 20 lbs./acre were effective in killing milfoil in Currituck Sound. W. E. Chappell, Aerial Enterprises, Inc., Roanoke, Va.

—Larvae of the moth *Parapoynx stratiotata* (L) feeds on the submerged foliage of milfoil while the curculionid beetle *L. todactylus leucogaster* attacks the emergence stems and flower buds. In an aquarium situation, larvae of the moth were able to destroy all exposed plants. R. I. Sailer, ARS, USDA, Beltsville, Maryland.

—Use of the laser beam has produced "delayed kill" in laboratory tests. The beam sears the leaf tissue, apparently disrupting photosynthesis. Plant growth stops, and in about five to six weeks exposed plants die.

"Natural Look" Right-of-Way

Public pressure has brought on the "natural look" trend in right-of-way maintenance. The clearing practice is changing from the straight swath to that of removing only vegetation which could interfere with lines, reported Hyland



WSSA officers for 1970 are, right to left: President—L. L. Danielson, Weed Investigations, Horticultural Crops, USDA's Agricultural Research Service, Beltsville, Md.; president-elect—D. L. Klingman, Plant Industry Station, Beltsville; vice-president—R. P. Upchurch, Monsanto Company, St. Louis; secretary—Arnold P. Appleby, Department of Farm Crops, Oregon State University, Corvallis; treasurer and business manager—F. W. Slife, Department of Agronomy, University of Illinois, Urbana; editor of Weed Science—E. G. Rogers, Department of Agronomy, University of Florida, Gainesville; and past president—G. C. Klingman, Eli Lilly & Company, Greenfield, Ind.

Johns, Asplundh Tree Expert Company. Trees are left in low areas where enough clearance exists. Access roads are being built diagonal to highways.

In some instances, as many as 30 to 50 trees have been planted to screen the right-of-way from the highway, said J. B. Middleton of

Pennsylvania Electric Company.

To Please the Public

Anything—within reason—to please the public is the goal. And W. D. Dittman of Appalachian Power Company, Roanoke, Va., had some prescriptions for dealing with people.

Obviously, people are becoming collectively concerned, judging from the number of bills at all levels of government, he said.

Tell people what materials you are using and what effect they will have on the environment, he advised.

"We put a lawyer on our staff, then sent him to Amchem to become familiar with the legal aspects of herbicides.

"We have a veterinarian on a retainer basis. We sent him to Dow Chemical. When a complaint comes in, he can tell the farmer what's really wrong, rather than 'We didn't do it.' On occasion, the farmer gets his livestock examined at our expense.

"We support research with money, not lip service."

Dittman added that it was highly important to react to every complaint. "Big problems often come from minor accidents."

He hopes the next step will be to get a doctor specially trained to answer people's concern about herbicidal effect on human health.

Just finding a way to neutralize herbicide odors would be a big help, said Dittman.

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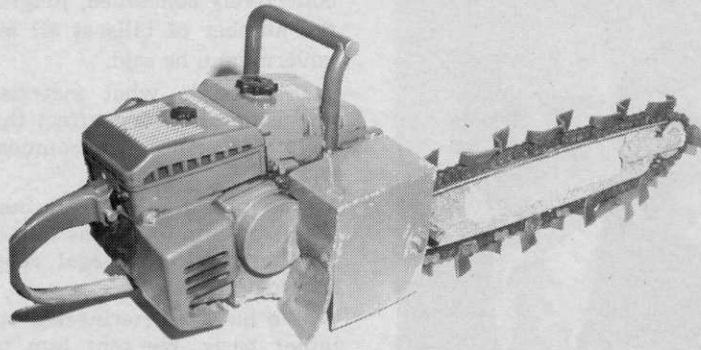
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Nurseryman Digs Trench With Power Saw

Dig a 30-ft. ditch in 60 seconds? Bernard Wherry claims he can do it with his saw. Actually, it's a Homelite chain saw — modified.

Wherry had been working on a chain-driven trenching tool for 3½ years. He needed one for fast digging around trees and shrubs. He's owner of Wherry Nurseries, St. Marys, W. Va.

His idea took practical shape when he modified an XP-1130 Homelite head. Instead of saw teeth, the chain mechanism contains a series of canted cutting heads. It will cut a ditch from two to six inches wide and 2½ feet deep, says Wherry.

"It's geared down and will last for ages," he said. "Works any-

where, any position, by simply guiding it with one hand. Digs around 2,000 feet of ditch per 1½ pints of gasoline.

"We even use it for draining swamps, water holes and digging fence post holes."

Considering that the base unit was made by Homelite, a division of Textron, Wherry figured the company would be interested. It was. Thomas Hunter, new products manager, and Bill Boracheck, project engineer, visited Wherry. Hunter tried the saw . . . uh . . . trencher. He claims a 10-foot ditch in 28 seconds.

Production plans aren't completely worked out yet, but if you want more information, circle (711) on the reply card. No doubt, sample lots will be undertaken before full production begins. But Homelite knows it has at least 100 units sold. Wherry wants 'em.

Midwest Sod Growers Set Soil and Seed Specifications

With the introduction of specifications for soil preparation and sodding, the Midwest Turfgrass Growers Association has reported that an increasing number of landscapers, architects and builders are meeting with sod producers to discuss turfgrass and sodding.

The Midwest group shared experiences at its annual meeting recently

in Lincoln, Neb.

Members also discussed a committee study and recommendation for turfgrowers' seed specifications. A resolution was passed that declared Association members would use only seed that met the specifications. These specifications are being published and will be distributed to members.

Growers discussed the possibility of the Midwest group becoming affiliated with the American Sod Producers Association and of indi-

vidual state associations becoming a part of the Midwest group.

Joe McDermott, Loveland Lawns, Omaha, Neb., was re-elected president; Ed Keeven, Emerald View Sod Farms, Inc., O'Fallon, Mo., as vice-president; and William Latta, Latta-Scholes, Inc., Kansas City, as secretary-treasurer.

New board members elected to two-year terms are: Jack Meyers, Stilwell, Kan.; Bruce Huffaker, Hastings, Neb.; and Duane Thompson, Arlington, Neb.

Insect Report

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



TURF INSECTS FIRE ANT

(*Solenopsis geminata*)

TEXAS: Heavy along highway roadside near Clay in Burleson County and south of Navatota in Grimes County, also near College Station in Brazos County.

A HARVESTER ANT (*Pogonomyrmex californicus*)

UTAH: Collected at St. George, Washington County. This is a new county record.

INSECTS OF ORNAMENTALS

A SOFT SCALE

(*Ceroplastes ceriferus*)

FLORIDA: Adults infested stems of 10% of 11,300 plants of *Podocarpus* sp. in nursery at Lake Monroe, Seminole County.

TREE INSECTS

PINE NEEDLE SCALE

(*Phenacaspis pinifoliae*)

CALIFORNIA: Eggs and adults heavy on Monterey pine at Yuba City, Sutter County.

OYSTERSHELL SCALE

(*Lepidosaphes ulmi*)

CALIFORNIA: Heavy on maple tree nursery stock at San Jose, Santa Clara County.

TWIG GIRDLER

(*Oncideres* sp.)

TEXAS: Heavy damage on oaks 3 to 8 feet tall in Sam Houston National Forest in Montgomery County.

A CLEARWING MOTH

(*Paranthrene robiniae*)

CALIFORNIA: Larvae medium on cottonwoods at Solvang, Santa Barbara County.

OBSCURE SCALE

(*Melanaspis obscura*)

ALABAMA: Medium to heavy on many oaks along streets and walks at Auburn, Lee County. Many small to larger lower limbs dead; others weakened.



Dr. Lyle W. Weldon

Aquatic Weed Researcher Dr. Lyle Weldon Drowns

Dr. Lyle Weldon, 35, one of the nation's foremost aquatic weed researchers, is dead as the result of accidental drowning.

Dr. Weldon died Feb. 1 while scuba diving in Lake Susannah on the Naval Training Base at Orlando, Fla. He was trying to find suitable sites to conduct submersed weed research, reported Robert D. Blackburn, of USDA's Agricultural Research Service.

Dr. Weldon was a certified and experienced diver, Blackburn said. The cause of the accident just isn't known.

He had been diving alone, but had a friend, Art Barrett, waiting on shore. He surfaced and called for help; but by the time Barrett was able to get a boat and reach him, it was too late.

Professional divers have retraced his diving pattern, Blackburn said, but have been unable to determine the cause of drowning.

Dr. Weldon had published some 90 articles, several of them authored with Blackburn. A number of his articles have been published in

WEEDS TREES and TURF. The most recent three, co-authored with Blackburn, were on new methods for combating aquatic weeds, October, 1967; Eurasian Watermilfoil, November, 1967; and a report on controlling Hydrilla Verticillata, October, 1969.

Weldon, native of Oregon, had worked for USDA since 1956. He transferred to Fort Lauderdale in 1960 to work in aquatic weeds. He earned a bachelor's degree in farm crops from Oregon State University in 1955; a master's degree in agronomy with minor in botany from the University of Wyoming in 1956, and his doctorate in agronomy with minor in plant physiology and statistics also from Wyoming in 1959. He took additional graduate work at North Carolina State College and at Oak Ridge Institute of Nuclear Studies.

Weldon was active in several regional and national associations of weed scientists. He had acted as an aquatic weed control consultant to the governor of the Panama Canal Zone and to Suriname Aluminum Co., on aquatic weed problems in South America.

He is survived by his wife, Shirley; two daughters, Kara Lee, 12, and Katherine, 10; and one son, Lyle William Jr., 7.

A-C Announces Expansion

Henry Corporation, subsidiary of Allis-Chalmers, announces it will double production capacity of its Topeka, Kan., plant with an \$800,000 expansion.

Topeka is headquarters for AC's industrial tractor and equipment division. Henry Corp. produces attachments, including backhoes, loaders, fork lifts, and logging equipment for the division's line of industrial tractors.



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National Lawn And Garden Week: March, April, May

National Lawn and Garden Week really was a week in 1969. In 1970, it's three months.

Maybe the decision for the longer period came about because of the theme, "Growing With America." After all, not much growing can be accomplished in a week.

So this year's observance has been broadened to include the spring months of March, April and May. The initial observance is in Washington, D.C., Mar. 20, the first day of spring.

March is "Plan to Grow Month;" April, "Plant for Proper Growth;" and May, "Pick a Growing Project."

The objective of the national observance is to bring improvement in the appearance of homes, neighborhoods, business districts, and entire communities through the proper planting and maintenance of lawns, shrubs, flowers and trees — year around.

Hopefully, people who take an



interest in beautifying things, will hardly be content with blight and ugliness elsewhere. Their efforts could bring changes and demands to preserve and purify other aspects of human environment, in the heart of big cities as well as in suburbs and small towns.

Co-chairman for the 1970 observance are W. Atlee Burpee III, Philadelphia, and Harold R. Lewis, director of information, USDA.

ALCA Announces '70 Officers: Warren Purdy Is President

Warren F. Purdy of San Diego, president of Purdy & Associates, is the new president of the Associated Landscape Contractors of America. He was named to succeed Thomas O. Lied of Milwaukee at ALCA's eighth annual meeting recently in Orlando, Fla.

Other officers are: President-elect—Wallace A. Gunderson, president of a landscaping contracting firm bearing his name, Rapid City, S. D.; vice-presidents—Norman A. Gray, president of Transit Seeding, Inc., Mansfield, Mass., and Ralph Pinkus, president of North Haven Gardens, Inc., Dallas, Tex.; secretary—Jerry J. Lankenau, vice-president of Lankenau-Damgaard and Associates, Plymouth, Mich.; and treasurer—William A. Rae, president of Frost and Higgins, Burlington, Mass.

Pacific Toro Schedules Field Days in March

A series of field days to demonstrate Toro mowers and tractors, Ryan turf products, Moist O'Matic irrigation equipment, and Allied Turf products are set for March in California.

Hugh G. McKay, sales manager of the turf products division of Pacific Toro Company, Gardena, announces these dates and locations:

Mar. 17—Vacation Village, San Diego; Mar. 18—La Palma Park, Anaheim; Mar. 19—Montebello Country Club; Mar. 24—Encino Community Building; Mar. 25—MacKenzie Park, Santa Barbara; and Mar. 27—Cal Poly College, San Luis Obispo.

R. W. Ickes Elected President Of Aerial Application Corp.

Raymond W. Ickes, son of Harold L. Ickes, the Secretary of the Interior under Presidents Roosevelt and Truman, has been elected president and a director of Aerial Application Corporation, the nation's largest agricultural aviation company engaged in insect and weed control, fertilizing and seeding. The firm also has plans well advanced to move into the fire fighting and forest fertilization fields in the near future.

The announcement was made by Stuart M. Speiser of New York, board chairman of the company which will have its principal executive and operating offices in the Russ Building, 235 Montgomery Street, San Francisco.

Ickes, who will make his headquarters at the Russ Building office, has been active in San Francisco business affairs for more than 20 years, having served successively as

vice-president and general counsel of American Independent Oil Company; vice-president and director, Natomas Company; and more recently as president and director of Pacific Far East Line, Inc., and then of American President Lines, Ltd.



Thomas P. Caldwell, III, of Apopka, and Michael T. Ayer, of Ocala, center left to right, University of Florida students majoring in ornamental horticulture, Turf-Grass scholarship winners, display their awards as Dr. G. C. Horn, left, professor of Ornamental Horticulture, and Dr. Charles B. Browning, Dean of the College of Agriculture, University of Florida, look on. Caldwell received the Miami Beach Host Committee National Parks and Recreation Association Scholarship, and Ayer was awarded the Col. Frank Ward Scholarship. Both scholarships were presented by the Florida Turf-Grass Association.