



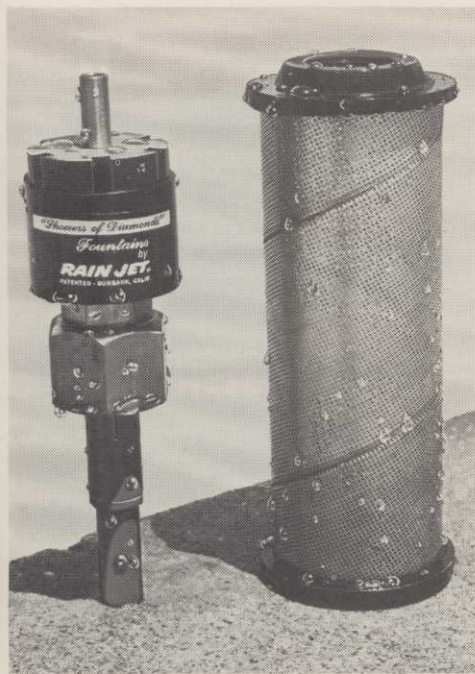
**SPRAYER, L. L. Larson Machine, Inc., Princeville, Ill.**

New Model HP-305 All-Purpose, High-Pressure Sprayer is built on heavy-duty tubular frame chassis trailer with 11:00x15" high-flotation tires. 300-gal. epoxy-coated tank has sight gauge and features 12x15-inch top opening. Tank is skid-mounted for use on trailer unit or in pickup truck. Pumping unit powered by 7-hp Kohler engine with 10 gpm pump for pressures up to 400 lbs. Mechanical or jet agitation. For more details, circle (703) on the reply card.



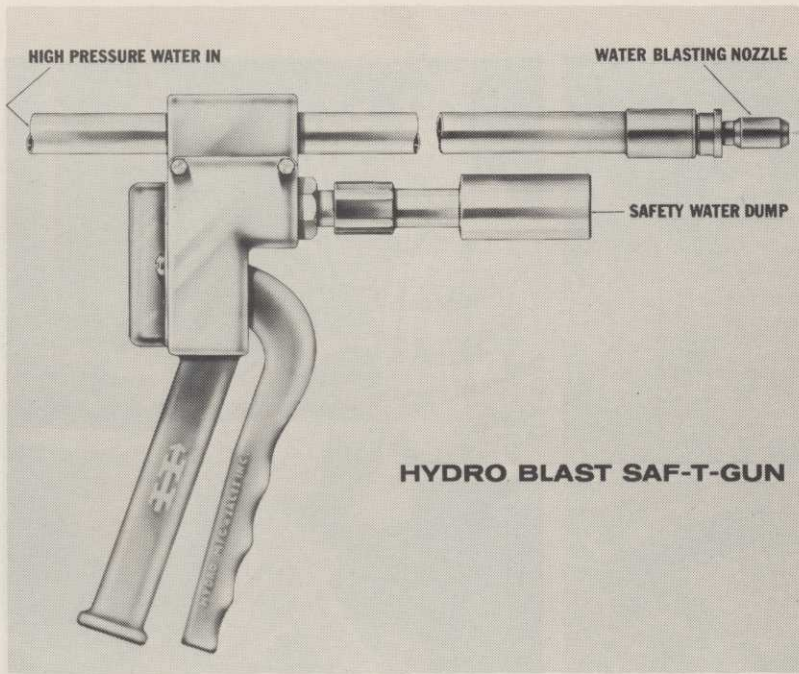
**BEMAS BROADCASTER, The Service Group, Oakville, Ontario**

Norwegian-built Bemas broadcaster is a compact, light-weight, fully adjustable spreader for all types of fertilizer. The two models available are tractor-mounted, 3-point hitch. Model 400 (pictured) has 900-lb. capacity with 65-pound material. Weighs 165 lbs. Model 210 has 500-lb capacity; weighs 120 lbs. Extension ring for Model 210 increases hopper capacity to 850 lbs. For more details, circle (704) on the reply card.



**FOUNTAIN HEADS, Rain Jet Corporation, Burbank, Calif.**

Eight new Fountain Head Junior Jet Sets have been announced. They consist of head and pump strainer, with installation instructions. Purchaser provides his own recirculating pump and pool for this do-it-yourself system. Five in the Group A set are 3/4" diameter and rise 6 feet; others are 1/2" and rise to 3 feet. A free, 4-page catalog and price list is available. For more details, circle (708) on the reply card.



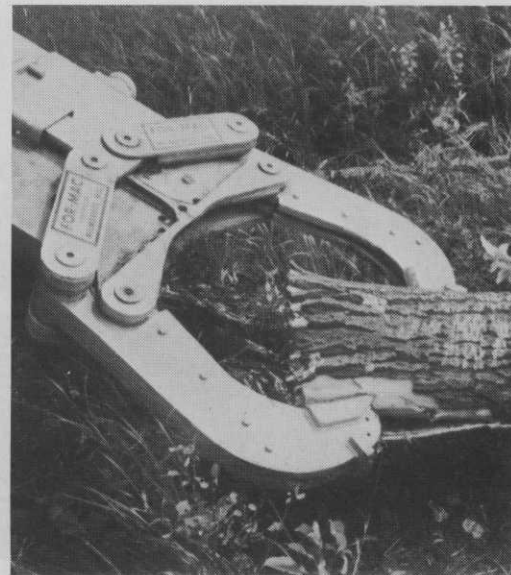
**WATER BLASTING GUN, Hydro Manufacturing & Sales, Inc., Missouri City, Tex.**

This new pistol grip gun for water blasting is capable of handling water pressures up to 10,000 psi and delivering up to 60 gpm. Hydro blasting is effective method for removing rust, scale, oil stains, grease, slime, algae, tar, fat, loose paint, acid, sludge, concrete splatter, slag, marine encrustations, and weather stains. It has proved more economical than other methods of cleaning heat exchanger tube bundles, tanks, towers, reactors, tractors and heavy equipment. A unique feature is an exclusive 224 to 1 compound cam action valve-closing leverage that gives the unit an extremely light trigger pull. The gun shuts off a split second after trigger release. Safer and more accurate. For more details, circle (709) on the reply card.



**New Products**





**BUNCHING-SHEAR, For-Mac Corporation, Milwaukee, Wis.**

The Bunching-Shear tractor attachment is designed to fell and skid whole trees into bunches, or turns, before limbing, topping or bucking. Pictures from the left show guillotine blade in position; immediately after cut—note low stump height and small amount of fibre damage; and jaws pinching tree for skidding. Shear capacity, 20" diameter (15"

hardwood); felling time, 5-6 seconds with 40 gpm pump; operating pressure, relief valve set at 1,850 psi; rotating arc, 143 degrees over-all; felling height, maximum 48 inches and minimum 4 inches; weight, 2,000 lbs.; length, 84 inches; blade thickness, 3/8-inch; 3-point hitch. Typical team is a three-man crew—an operator on the tractor and two men on the ground with chain saws. For more details, circle (710) on the reply card.

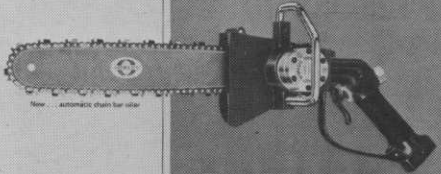


**CHAIN SAWS, Allis-Chalmers, Milwaukee, Wis.**

Three new chain saws and a blade saw have been added to the Allis-Chalmers line of outdoor power equipment. Chain saws include model 95, capable of felling and bucking trees up to 34 in. diameter; Model 195 (pictured left), with automatic and manual oiling systems and Model 295 with push-button sharpener. Model 85 blade saw (pictured right) is gear driven. A 17 in. bar and chain and blade are standard. The saws have ball and needle bearings to reduce friction and wear and extend saw life; and 3.6 cu in. displacement air-cooled, two-cycle gasoline engines. Magnesium die cast housings. Automatic rewind and oversize pulleys to provide easier starting. Baffled spark arresting muffler. Optional equipment—12 to 25 in. bars, 13 and 14 in. bows, and 16 to 24 in. roller nose bars. For more details, circle (713) on the reply card.



speed your cutting jobs with the **EASY WAY** at **LESS COST** with the **WORLD'S LIGHTEST** chain saw



**ACKLEY HYDRAULIC**  
pistol grip CHAIN SAW

**SMALL IN size, BIG CUT**  
for "big" applications

**ACCESSIBLE AND PRECISE**  
blade for maximum control

A lightweight design with cutting force—no heavy, bulky handles to hold or steady. The lightest pistol grip saw on the market.

**EASY, ONE-HAND OPERATION** from either hand to hold. No need to hold. One-handed operation on steady, self-cleaning, self-cleaning.

**PORTABLE** Works off mobile equipment, variable power packs or fixed power sources.

**COMPATIBILITY** easy to mount existing models and fixed hydraulic cutters with simple of repair or varied center shaft design.

**EASY — POWERFUL** Exclusive Ackley HYBRID hydraulic motor allows rapid, dependable, free maintenance.

See other ads for complete specifications.

**HYDRAULIC-POWERED CHAIN SAWS, Ackley Manufacturing Co., Clackamas, Ore.**

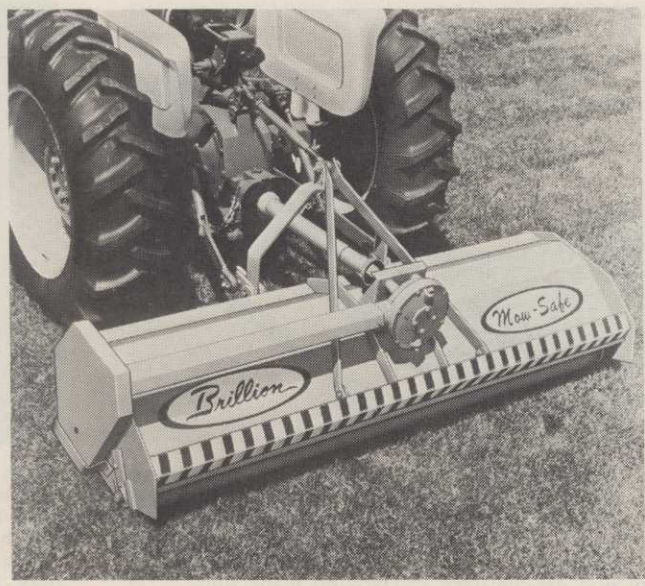
These light, easy to handle saws operate on readily available power sources of either open or closed center types. Sales brochure above lists chain length options, chain speed data, required hydraulic gpm and pressure and other buying decision details. Accessories, such as a fiberglass holster for handy carry and storage, are described. For more details and copy of brochure, circle (714) on the reply card.





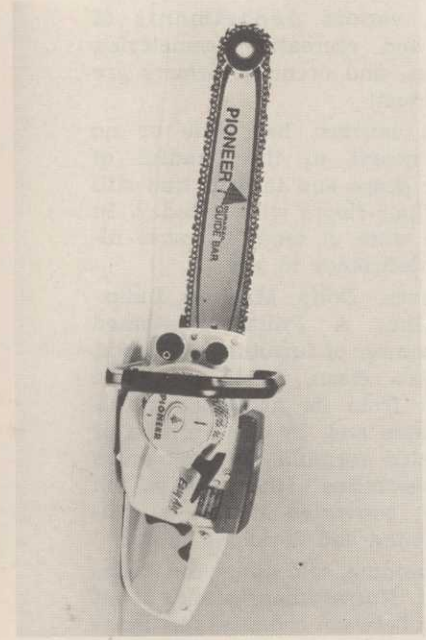
**LOADER, International Harvester Co., Chicago, Ill.**

The 1050 Series A Loader is designed for the IH Cub 154 Lo-Boy tractor. The new tractor/loader combination will handle light and medium duty loading for landscape contractors, nurseries, greenhouses, truck gardeners, and many others. The double-boom loader will hydraulically lift up to 550 lbs. to a full height of 7 ft. 10 in. Loader hydraulics are supplied by a separate 7.6 gpm hydraulic pump driven from the tractor pto. For more details, circle (711) on the reply card.



**FLAIL MOWER, Brillion Iron Works, Inc., Brillion, Wis.**

Mow-Safe, an 88" three-point pickup flail mower, is for cutting grass and weeds in large maintained turf areas. The new MS-880 is said to be the safest mower made for working in parks, rights-of-way, golf courses, and other institutional mowing projects. It is designed for precision mowing, without scalping or windrowing, at adjustable heights from 3/4" to 3". The MS-880 is said to be the only mower with factory-balanced rotor-blade assemblies, minimizing blade wear and damage to shroud and other components. For more details, circle (712) on the reply card.



**CHAIN SAW, Pioneer Saws, Ltd., Peterborough, Ontario**

Two features in the 2071 make it ideal for general use: the exclusive "Easy-Arc" starting, a decompression system that requires only a gentle pull to start it; and a semi-automatic chain tensioner that helps to properly adjust the chain. Other features include automatic chain oiling, a .298" fine pitch Sureguard saw chain, replaceable roller nose, longer and narrower 16" guide bar, and spark-arresting low tone muffler. Weight is 9 1/2 pounds. For more details, circle (715) on the reply card.



**CHAIN SAW, Orline Products, Los Angeles, Calif.**

The new Mustang 14" saw weighs 10 lbs. and features automatic oiling, conveniently located on-off switch. Improved handle design has been strengthened for additional hours of rugged use. It has a new, spark-arresting over-size muffler. Powered by new O&R gear-driven engine, a 2-cycle 1.3 C.I.D. unit. Starter component can be repaired or replaced without removing the blower housing. For more details, circle (716) on the reply card.

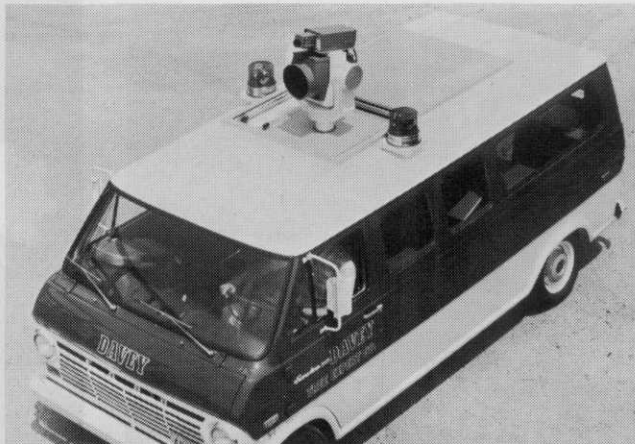


**CHAIN SAW, McCulloch Corporation, Los Angeles, Calif.**

Called the world's lightest chain saw, the Mini-Mac 6 weighs 6 1/2 pounds plus cutting attachment. Dimensions of power unit are 7 1/4" H x 8 1/2" L x 7 1/2" W. Has 12" bar and chain. A companion model, the Mini-Mac 6A offers automatic chain oiling and longer 14-inch bar and chain. Both have 30 cc two-cycle engine. Safety is served by the Master Grip handle that provides for control of the saw over its center of gravity. For more details, circle (717) on the reply card.

**New Products**





New Davey fault detection van is quickly positioned to allow automatic scanner to cover all components. An AGA Thermovision infrared camera and high resolution TV camera are mounted on a pedestal that raises the sensor gimbal through the vehicle roof and provides a weathertight interlock. The van also can be used for moving inspection.



When potential trouble is detected, the operator stops the automatic scanning and measures the temperature. Variations from ambient temperature are recorded and a photograph (above) is made of the IR display to record the position of the problem component. TV view screen supplements poor resolution capabilities of the thermovision camera.

## Davey Tree Announces Fault Detection Service

Davey Tree Expert Company, Kent, Ohio, has entered the remote fault detection field with a new infrared inspection van.

Project coordinator Martin L. Davey, Jr., says, "The ability to detect and isolate overheated com-

ponents before a serious outage occurs is a significant advancement in power transmission and distribution preventive maintenance, but improvements in inspection techniques were needed. We think our unit has eliminated many former problems."

Infrared inspection of power transmission and distribution facilities is a recent application in remote temperature measurement techniques. An infrared camera is used to generate at TV type image corresponding to the thermal patterns in a viewed scene. Components of higher temperature appear bright while cooler ones remain dark. The thermal image is displayed on a monitor in the van for interpretation by the operator. Temperature measurements of detected bright spots are made with the infrared camera system and recorded. Photographs of the thermal image are then taken to record the location of the problem component.

Paul D. Zidek, who designed the mobile unit for Davey, reports that previous experience with infrared cameras used for fault detection revealed several operational difficulties. Problems of utilization under adverse weather conditions, difficulty of coordination between scanner and display operator, unnecessary setup and take-down times, false indications from sun reflections, and difficulty in locating the fault, all reduced the efficiency of the technique. Outstanding features of the new Davey unit are programmed scanning, closed circuit TV viewing, and its weather tight features.

The mobile inspection van is completely self-contained, requires no external power tie-ins, and can provide moving inspection of lines.

## Furniture Firm Turns Sawdust into Sawbucks

One company, with the help of biological science, has solved a knotty problem and turned a former waste product into the talk of the agronomy and horticultural fields.

The accolades from Purdue University, various departments of parks and recreation, cemeteries, nurseries, and orchard farmers are for sawdust!

Fresh sawdust has little or no value except to the handful of butcher shops and taverns that still adorn their floors with it today. In its raw state, it tends to cause nitrogen deficiency in soil.

However, Dolly Madison Industries, Inc., a Philadelphia-based manufacturer of furniture and foods, has taken clean, fresh, weed-free sawdust from its hardwood furniture plants and, by the addition of a patented formula of fungivorous micro-organisms (they thrive on fungus), converted it into a soil-conditioning and enriching mulch.

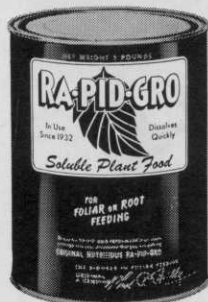
The product, sold under the tradename of "Nurseryman," stands about midway between chemical fertilizers and peat moss as a soil conditioner.

Nurseryman mulch has a uniform texture — almost granular — and pours or may even be applied with a spreader. It is fully activated and does not rely on circumstances of soil to begin decomposition.

The mulch makes a perfect top dressing, too. It is less prone to blowing about than peat. It does not crust over when wet and it is not a fire hazard when dry.

For additional information, circle (718) on the reply card.

# KEEP AMERICA BEAUTIFUL



### "The Pioneer in Foliar Feeding"

Honored by American Horticultural Council "for demonstrating in a practical way that plants could be fertilized through their leaves; for being the first to develop and market an effective plant food for foliar feeding; and for opening the way to a new cultural practice in horticulture."

## RAPID-GRO



## Pen a Note for Chlordane, Heptachlor

Those who feel chlordane and heptachlor are needed for control of soil insects in turf should write to the U.S. Department of Agriculture, said Robert R. Garrison, president, Velsicol Chemical Corporation, manufacturer of the two insecticides.

"Otherwise, officials who regulate pesticides may assume these label registrations are no longer important and may cancel them," Garrison warned.

U.S.D.A. has requested comments and opinions regarding chlordane and heptachlor in the Federal Register on July 31, "in order to determine if certain uses are essential and if there are no effective and safe substitutes." Information concerning these insecticides, especially the insects controlled and the damage or injury expected without their use, should be sent before Oct. 29 to: Director, Pesticides Regulations Division, Agricultural Research Service, U.S. Department of Agriculture, Washington, D. C. 20250.

There still is a need for the use of chlorinated hydrocarbons for control of soil insects, Garrison commented, especially for those insects, such as grubs and wireworms, which have long life cycles.

Garrison said the concept that a pesticide be used only if the use is considered to be essential and if there is no effective and safe substitute will practically stop the future development of new pesticides.

"This concept provides no objective standard upon which regulations can be based," he said. "A chemical company cannot commit millions of dollars in research and development for a new pesticide if the market is temporary — that is, if the new pesticide is to be used only until another new pesticide is judged to be more effective and safer for a particular use. A company would never know for sure what factors would determine a compound being removed from the marketplace."

## Arkansas Survey Sizes Up Alligatorweed

Alligatorweed infestations in Arkansas are not as severe as thought.

That's the conclusion of a survey taken recently by the Arkansas State Plant Board, Army Corps of Engineers and Extension Service personnel. The Corps covered major waterways and impounded waters by boat and airplane. County agents covered their areas.

Melvin C. Tucker, director of the division of plant industry, summarized the findings:

"Results were encouraging because alligatorweed was not found as widespread as anticipated. It is plentiful in bayous and canals in southwest Arkansas County where first discovered in the state. It also is in the Arkansas River in this vicinity. The mouth of Mill Bayou for some distance is completely choked and the Bayou Meto infestation is increasing rapidly.

"Bayou Bartholomew was found to be infested at Pine Bluff and for a few miles south of there. Swan Lake in that area is very heavily infested. The Arkansas River infestation, although light at present, poses a threat not only to river traffic and recreation but to agriculture in the entire Arkansas River Valley. This threat is made more serious by the

loss of 2,4,5-T, and probably Silvex in time, to the anti-pesticides.

"Other than the above serious problems, alligatorweed was found in lesser amounts in ornamental plantings in Blytheville and Little Rock. These infestations were probably in with nursery stock from the Mobile, Ala., area. A small farm pond was found infested south of El Dorado. The pond owner immediately stocked it with geese and they have reduced the weed population considerably this summer. The owner believes the geese will eliminate the alligatorweed in another year or so."

### Village Blacksmith Expands

Village Blacksmith® Division of McGraw-Edison Company, Watertown, Wis., has assumed all operations of Northern Industries, Inc., Milwaukee.

The Blitz Fog® line of propane foggers was a pioneer in the pest control industry. Village Blacksmith® has for more than seven decades been known for lawn and garden products and outdoor equipment.

The combination of these two lines broadens the scope of outdoor products marketed under the Village Blacksmith® name.



The one way to enjoy effective control of broadleaved weeds and brush *plus* the benefits of resistance to drift, washoff and evaporation, no pre-mixing, and less refilling *plus* the assurance of quality backed by our name just has to be worth the price... less than you might expect. Visko-Rhap\*, the ONE way.

\*Trademark of Hercules Incorporated

Available in low volatile and oil soluble amine formulations of 2,4-D, 2,4,5-T and Silvex from Agricultural Chemicals, Hercules Incorporated, Wilmington, Delaware 19899.



**HERCULES**

SP 70-5



## Consulting Arborists Name Davis Executive Director

A full-time executive director has been named for the American Society of Consulting Arborists.

He is Dr. Spencer H. Davis, Jr., plant pathologist at Rutgers University, New Brunswick, N.J. Davis succeeds Martha Jones, who had been acting on an interim basis.

Communications concerning ASCA activities should be directed to Davis. His address is: 12 Lakeview Ave., Milltown, N.J. 08850.

In announcing the executive director, ASCA president Ray Gustin, Jr., expressed the belief that Davis' experience with and knowledge of trees should provide valuable assistance to ASCA.

The consulting arborist association was formed three years ago by eight old-time tree men, said Gustin. ASCA now has more than 60 members in the U.S. and Canada, he added.

"What makes ASCA just a little



Leadership for the American Society of Consulting Arborists: From the left, President Ray Gustin, Jr., Gustin Gardens, Gaithersburg, Md.; Executive Director Dr. Spencer Davis, Rutgers University; and President-elect George W. Goodall, Goodall Tree Expert Co., Portland, Me.

bit different from the thousands of trade associations, and new ones being formed every day," noted Gustin, "is that its formation crystalized a

new profession. An arboricultural consulting service fills a long needed service and it has added prestige to the arborist profession."

## insect report



### TURF INSECTS A MEALYBUG

(*Phenacoccus eriogoni*)

CALIFORNIA: Counts of 20 per stem on weeds in Elk Creek, Glenn County. This is a new county record.

### OYSTERSHELL SCALE

(*Lepidosaphes ulmi*)

CALIFORNIA: Averaged 1,000 per limb on bitterbrush (*Purshia tridentata*) on scattered plants along Highway 99 north of Mt. Shasta.

### SOD WEBWORMS

(*Crambus* spp.)

COLORADO: *C. mutabilis* larvae, 3-4 square yard, caused severe damage to lawns in Fort Collins area, Larimer County. ARIZONA: Treated 60 acres of Tifgreen Bermudagrass for *Crambus* sp. at Tolleson, Maricopa County.

### INSECTS OF ORNAMENTALS

#### ASPEN BLOTCH MINER

(*Lithocolletis tremuloidiella*)

MONTANA: Defoliated ornamental populars at various locations over state.

#### AN ERIOPHYID MITE

(*Trisetacus juniperinus*)

WASHINGTON: Severely stunting and destroying buds and new growth of *Juniperus procumbens*. About 80% of buds infested at Tumwater, Thurston county.

#### TWO-SPOTTED SPIDER MITE

(*Tetranychus urticae*)

FLORIDA: All stages moderate on 1,000 dieffenbachia plants at Perrine, Dade county. Control not effective.

### TREE INSECTS

#### ELM LEAF BEETLE

(*Pyrrhalta luteola*)

ALABAMA: Damage to lawn and street elms heavier than during last 2-3 years in central to north areas. Serious damage caused almost complete defoliation in Demopolis and Thomaston area of Marengo county. MISSISSIPPI: Larvae and adults caused heavy damage to Chinese elms in Oktibbeha, Lowndes, and Calhoun counties. NEW MEXICO: Heavy and skeletonized elms at Lincoln. Lincoln county, and at Tularosa, Otero county. Many damaged leaves fallen. TEXAS: Damaging Chinese elms in Wilbarger; Wichita, Lubbock, Hockley, Bailey, Winkler, Midland, Martin, Glasscock, Ector, Pecos, Upton, Ward, Reagan, and El Paso counties. UTAH: Still damaging in many localities; very severe at Moab, Grand county, and some San Juan county communities.

#### FOREST TENT CATERPILLAR

(*Malacosoma disstria*)

KENTUCKY: Epidemic populations caused defoliation of 1,200-acre area in Hopkins, McLean, Mecklenberg, and Ohio counties. ALABAMA: Defoliated total of 45,820 acres of water tupelo in the Mobile and Tensaw river basins in southwestern area; about 24,360 acres classed as heavy defoliation. LOUISIANA: Infestations reached heaviest level since 1963 in southeastern area, total of 447,000 acres of water tupelo forest damaged. Infestation declined from 10,000 acres in 1969 to 2,500 acres in Mermentau river basin.

#### SADDLED PROMINENT

(*Heterocampa guttivitta*)

MAINE: This pest and associated species severe with up to 100% defoliation on about 12,000 acres of beech, sugar maple, birch, and other hardwoods in Oxford county. Pupation complete. MASSACHUSETTS: Larvae of this species and *Anisota rubicunda* (green-striped mapleworm) heavy on maple, with defoliation estimated to be 75-95% in some areas of Franklin county.



# Hydrilla Seen As Florida's New No. 1 Pest

In the next ten years hydrilla will replace water hyacinths as Florida's number one water weed problem, a U.S. Department of Agriculture botanist predicts.

Robert D. Blackburn, the botanist who heads research on aquatic vegetation at the University of Florida's agricultural experiment station at Fort Lauderdale, Plantation Field Laboratory, sees hydrilla as the greatest potential threat to Florida's waterways.

Hydrilla is a submersed water plant that grows rooted to the bottom and has long, branching stems.

Even if above-soil portions of the plant are completely removed by mechanical or herbicidal methods, the area will be rapidly reinfested from small propagules and rootstock nodes. Hydrilla plants produce stem tubers that are a means of propagation. Also, broken shoots will develop into new plants.

"Hydrilla was introduced in Florida in 1960, in a small canal in Miami and in an area near Crystal River," Blackburn said. "Now 70,000 acres of Florida waterways are covered with hydrilla."

Blackburn explained that hydrilla was first brought to Florida by aquarium dealers. "Northern dealers would plant exotic plants in Florida springs and streams to harvest later and sell in the aquarium trade," Blackburn said.

The last Legislature passed a law to restrict importation of exotic aquatic plants and prohibit their planting in state waters. However, though there is a penalty of a \$1,000 fine for violating the law, there are no special means for enforcing it.

Hydrilla is found in canals, ditches, pools, lakes, marshes, slow-flowing streams, rivers and tidal water areas. It will grow in water six to seven meters deep and can produce very dense mats of vegetation.

"Hydrilla already has become a real problem in Florida," Blackburn said. "Some of the Winter Park-Orlando area recreational lakes have been closed because of it."

Hydrilla stops water flow in canals and streams, impedes boating, fishing and swimming, interferes

with fish production, and may create a health problem.

Blackburn said that in Orlando area lake drownings have occurred when people have fallen from boats into the water and were trapped under the thick mat of hydrilla. "Hydrilla grows so thick in some areas," Blackburn said, "that birds and small animals can walk over the top of it."

Research in Orlando associated encephalitis with the plant, though this has not been extensively confirmed. It is known that leaf spines on hydrilla cause rash on contact and that the rash can become infected.

## Tote Herbicide Announced By C. B. Dolge Company

C. B. Dolge Company, Westport, Conn., has announced a new system-type of herbicide called Tote.

The weed killer acts on all perennial, biennial and annual growths, and also sterilizes the soil, doing the job for one entire season and well into the next, say company technicians.

Working through the roots, Tote has an exceptionally high LD<sub>50</sub> rating, the standard of toxicology measurement, that is well above other total-kill weed products now on the market, a company release stated. Besides its formulated active ingredients, Tote also contains an extender that has herbicidal effect for extra over-all total growth kill power.

One gallon of Tote in 15 gallons of water will treat 1,000 sq. ft. Even on dry ground, it is not wasted even if there is initial failure to penetrate to the roots, said the release, because a subsequent rain will put it to work.

Experience proves Tote gives at least 50% savings in labor, the release continued, and requires only 60 gallons of water per acre, compared with the 1,460 gallons required when applying sodium arsenite products. For details, circle (718) on the reply card.

## Buys Weather Guard Chest

Knaack Mfg. Co., Crystal Lake, Ill., has purchased Weather Guard Chest, St. Louis, Mo., manufacturer of tool and storage chests and accessories for pickup trucks. Knaack manufactures general-use steel tool and storage chests and accessories for contractors and industry.



# 0217®

## RAH! RAH! RAH!

Cheers can be heard all over the north temperate zones of the world for this giant among lawn seeds. Outstanding on all counts, Fylking Kentucky bluegrass is resistant to a wide range of diseases, including leafspot and stripe smut. Drought and winter tough, fine leaves of deepest emerald green grow in unusual density due to abundant sideshoots. Fylking produces no ugly seedheads, can be cut low as 1/2 inch for home putting greens, 3/4 inch for velvety carpet-like lawn. All facts proven in 12 years of international testing by noted authorities. Next lawn, seed or sod with 0217® Fylking Kentucky bluegrass (U.S. Plant Patent 2887). At your seed distributor. Write Jacklin Seed Co., Dishman, WA 99213 for information.



### FYLKING KENTUCKY BLUEGRASS

For More Details Circle (112) on Reply Card





**LAST ISSUE**, we chose a poem from the International Shade Tree competition that was appropriate to the editorial subject. Following is the poem that judges selected as the grand winner:

When I climb trees,  
The silly old bees  
Sting my fannyoo-e.

When the wind blows,  
My foot gets stuck.  
How do I get out of this  
Silly old rut?

But the sting of a bee  
Helps me!  
Out I fly from the  
Beautiful tree.

Down, down, down.  
Good grief!  
Crunch in the leaves,  
What a relief!

The author is Steve Coffin, fifth grader at Wayne Central School in Ontario, N.Y.

\* \* \*

**FRED K. BUSCHER**, Ohio Extension horticulturist, reports that Agricultural Research Service personnel at Beltsville, Md., have confirmed a new way to control slugs. They found from a four-day test that stale or fresh beer placed in a shallow pan caught more than 300 slugs, compared with only 28 caught with the standard slug bait containing bran, an arsenical, and an attractant called metaldehyde. Researchers, performing autopsies on the dead slugs, revealed their stomachs "loaded" with beer.

\* \* \*

**THE 10,000TH GOLF COURSE** opened for play July 31. According to the National Golf Foundation, the nation's source for golf information, the honor goes to Rancho Canada (East Course) Golf Course in Carmel Valley, California. Owned by professional Nick Lombardo, the course has a 6,600-yard, par 72 track. Robert Putman was the architect.

\* \* \*

**ONE ACRE OF GRASS** — about half of the front lawns in a block, says Dr. H. John Carew of Michigan State University, has the cooling effect of a 70-ton air-conditioner. "The cooling effect is caused by a loss of water from the grass," he explained. "On a single summer day, an acre of grass will lose about 2,400 gallons of water through transpiration and evaporation."

## Tree Care Faces Increasing Obstacles . . .

(Continued from page 29)

costs for removal of dead elm and maple trees has been realized from this program."

### Time Study of Tree Trim Costs

An extensive time study of tree trimming by West Penn Power Company has shown that: three-man crews were most productive; that a round-over clipped trim took 3.6 times longer than a natural-look trim; that production can vary widely from time to time between contractors and even crews; that exact specifications for work and periodic supervision can increase production.

J. Frank Wagner, forester for West Penn Power, said that of 244 timed tree trimming observations, the mean trimming time was 84 man-minutes, with a standard error of plus or minus 6%.

Part of instructions to contractors suggest that they approach each tree in a way to reduce its height with no more than 12 cuts that are staggered throughout the tree and shaded by other limb structures.

As an aid to goal attainment, the instructions state, use and stress the use by trimming crews of the following thought process:

1. Look at the conductors;
2. Look at the conductor interference;
3. Trace the conductor interference (the limb) back, on a priority basis, to a natural union with another limb;
4. Remove the conductor interference at the most desirable union;
5. Assure the best possible shape.

"Contractors engaged in firm bidding specific vegetation control jobs cannot afford to be without in-depth information about their operation," said Wagner. "Organizations employing vegetation control services cannot afford to ignore in-depth auditing of time and materials-type contracts. Such organizations should also attempt to describe tree-trimming work, as variable as we know it is, so that firm prices could be received for its satisfactory completion.

"However, since West Penn Power is concerned with community relations and beautification, the quality of work will definitely be evaluated."

### Election and Awards

As could be expected, New York provided the biggest state contingent for the record crowd, sending

196. Ohio was second with 99. Other leading states were Michigan, 59; Pennsylvania, 56; Illinois, 33; New Jersey, 32; and California, 26. Canada sent 54, Great Britain, 4; and the Netherlands, 2.

Next year's meeting will be Aug. 8 to 13 in Montreal. Convention cities suggested for 1976 and 1977 included Oklahoma City, Milwaukee, Memphis, Des Moines, Toronto, Philadelphia and St. Louis.

John A. Weidhaas, entomologist from Virginia Polytechnic Institute, Blacksburg, was elected vice-president. J. A. Kimmel, director of parks for Toronto, assumed the presidency. Noel B. Wysong of Golconda, Ill., retired as editor. He is succeeded by Dr. Dan Neely, with the Illinois Natural History Survey, Urbana.

These awards were announced: Award of Merit—President Richard M. Nixon and Edward P. Cliff, Washington, D. C.; Dr. John C. Swartley, Ambler, Pa. Authors Citation — Edward H. Scanlon, Olmsted Falls, Ohio; Dr. Albert E. Dimond, New Haven, Conn.; and Prof. Erik Jorgensen, Toronto, Ontario. Honorary Membership — Leslie Hebert, South Weymouth, Mass. Honorary Life Membership—Frank E. Karpick, Buffalo, N. Y., Orville W. Spicer, Darien, Conn.; Frank Hanbury, Peoria, Ill.; S. W. Parmenter, Kent, Ohio; George Hood, Jr., Palo Alto, Calif.; J. T. Turner, Atlanta, Ga.; and Richard E. Abbott, Canton, Ohio.



K. Dillinger, left, is describing the features of the Baker Equipment Co. aerial lift to Dean Schelle of Avon, N.Y.



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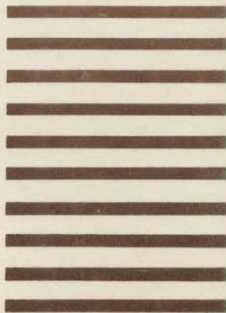
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# classifieds



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