

Industry News and Newsmakers



Southern California Turfgrass Council President Alfred N. Nobel (left) presents the Council's check to Victor B. Youngner and Victor A. Gibeault for turfgrass research at the University of California's South Coast Field Station.

California Turfgrass Council Aids Research With \$6000

The turfgrass research program at the University of California's South Coast Field Station in Santa Ana recently got an economic boost from the Southern California Turfgrass Council (SCTC).

Fulfilling a commitment made last year, the Council presented a \$3,000 check to U.C. agronomist Dr. Victor B. Youngner to assist with the ongoing undertaking.

Last April, the Council donated a like sum as the first installment to get the \$6,000 project underway. Youngner is directing the research program with the aid of Dr. Victor A. Gibeault, U.C. Cooperative Extension horticulturist.

Both attended the Council's January meeting to accept the donation. Representing the SCTC in the presentation was President Alfred N. Nobel.

Following the ceremony, Nobel emphasized the Council would welcome any funds from industry or private sources to further promote turfgrass research sponsored by the organization.

Butz, Train Call for Cooperative Effort In Applicator Training, Certification

EPA Administrator Russell E. Train and Secretary of Agriculture Earl L. Butz have announced the signing of an interagency cooperative agreement calling for Federal, State and local cooperation in the training and certification of pesticides applicators. The agreement will help to implement existing regulations concerning certification of applicators.

"This agreement will provide policy guidelines to regional, State and local agencies to promote the development of applicator training programs, by bringing Federal, State and local resources to bear on this activity," Train said. "These programs will help to insure both that restricted pesticides are used safely and that agricultural productivity is maintained."

"The Department of Agriculture's Extension Service will work closely with EPA to assist the States' Cooperative Extension Services in implementing training programs," said Secretary Butz. "The Extension Service is the basic educational arm

of the Department of Agriculture; therefore, its personnel and resources will be a vital part of our cooperative effort to train applicators in the safe use of pesticides."

EPA said applicator certification is a positive effort to insure the safe and proper use of potentially hazardous or environmentally damaging products. The Agency also noted that certification may permit continued use of those products which might otherwise have to be banned since they pose unacceptable hazards to people or the environment unless used by well-trained applicators.

Both Administrator Train and Secretary Butz believe that the training and certification program will help to maintain production while enhancing environmental protection. "We have a natural alliance here," Train said. "The present agreement will do much to lessen the risk of pesticide misuse which might otherwise threaten both of our efforts."

EPA estimates that domestic
(continued on page 42)



The Weed Science Society of America recently held its 15th annual convention in Washington, D.C., with more than 800 weed scientists attending. Officers elected for the coming year are (from left): Dr. T. J. Sheets, WSSA editor; Dr. F. W. Slife, president-elect; Dr. Will D. Carpenter, treasurer; Dr. C. R. Swanson, president; Claude Cruse, executive secretary; Dr. C. L. Foy, vice president; Dr. Ellery L. Knake, 1974 president; and Dr. G. R. Miller, secretary.

NEWS (from page 36)

consumption of pesticides now amounts to one billion pounds of active ingredients each year. These pesticides will be classified for "general" or "restricted" use as required by the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) as amended in 1972.

Amended FIFRA also requires that potential users of "restricted" products be certified by October, 1976, as being qualified to use such products safely. EPA estimates that 100,000 commercial applicators and more than two million farmers will need to use pesticides designated for restricted use and will have to be certified.

To carry out these requirements, EPA issued standards for certification of applicators on Oct. 9, 1974. On Jan. 13, 1975, the Agency issued guidelines for State plans for training and certifying applicators. The present cooperative agreement will help the States to implement training programs with organizational and technical assistance from USDA.

Zoning Exception for Beker Opens Door to Florida Mine

The Manatee County Board of County Commissioners, Bradenton, Fla., unanimously approved Beker Industries Corporation's request for a special zoning exception for mining an 11,000-acre site 26 miles east of Bradenton which the company estimates contains 75 million tons of phosphate rock.

"This is a major development for us," said Erol Beker, chairman of the board and the company's president. "It guarantees us the necessary raw materials for our existing plants in Louisiana and Illinois and makes possible the expansion of our fertilizer production in the United States and abroad." Project work will begin immediately and the mine will be designed to produce three million tons per year of phosphate rock and should be completed in mid-1977 at a cost of more than \$50 million.

Beker Industries is a major producer of phosphoric acid, diammonium phosphate, triple super phosphate and nitrogen with fer-

tilizer plants located in Louisiana, Illinois, Idaho, New Mexico and Canada. Beker's extensive phosphate rock deposits and mining operations in Idaho supply the rock for the Idaho fertilizer complex making Beker the only fertilizer company with rock mining operations located in both eastern and western markets.

If Florida, the company presented mining proposals which include simultaneous reclamation of the property along with the construction of an approximate eight-billion-gallon fresh water reservoir for the citizens of the Manatee County area. The proposals were developed in close consultation with local area government officials to meet all environmental concerns.

Beker has recently started up its anhydrous ammonia plants in Sarnia, Ontario and Conda, Idaho. These nitrogen plants, along with the phosphate rock operations in Florida and Idaho, place Beker in a basic raw material position for the two major raw materials needed in the production of fertilizer.

(more news on page 44)

DUTCH ELM DISEASE HAS MET ITS MASTER



We will train
your applicator

FREERS ELM ARRESTER*
can save your elms

14 years of proven results

"check before your chop"

FREERS ELM ARRESTER
P.O. Box 103
Muscatine, Iowa

* EPA REGISTRATION No. 7452-1

Turfgrass Shows Changing, So Are Attendance Figures

Regional turfgrass meetings and conferences are becoming increasingly popular as the expense of long-distance travel reaches a peak.

The national and international conferences that once supplied nearly all educational materials, equipment updates and chemical information are being challenged for effectiveness in the turfgrass industry. As a means of survival, several regional organizations have broadened their annual programs into extremely worthwhile and informative meetings.

The New Jersey Turfgrass Association recently wrapped-up a complete exposition — equipment show and educational session — for what appears to be the first in a long series of healthy turfgrass shows. Under the direction of Dr. Henry Indyk, the Expo included some 44 exhibitors and featured top speakers in areas of seed production, turf-

grass maintenance, fertilizer and equipment.

The Expo, which attracted over 500 people, was a new experience for New Jersey's traditional turfgrass show. And one of the newest and most successful experiences was the Hall of Fame Award.

The award, presented at the Expo was in recognition of James Smith, Sr.'s many years of service and accomplishments.

Smith, whose career has been associated with more than two generations of turfgrowers, was born in Scotland and came to America as a young man.

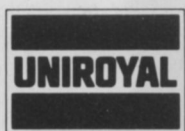
His Scottish background and interest in golf aroused his curiosity about turfgrass growing problems. He noticed the need for a quality topdressing material for putting greens. This led him to the Agronomic Science Department of Rutgers University where he spent many hours in the laboratory with Dr. H. B. Sprague in study of soil and topdressing preparation. The ensuing topdressing product for golf greens is now sold by the parent

company beyond New Jersey as far away as Maryland, Eastern Pennsylvania, Albany, New York, Western Connecticut and Long Island.



James Smith, Sr. (right) receives the first New Jersey Turfgrass Hall of Fame award from Leo Cleary, chairman of the Hall of Fame Committee.

(more news on page 50)



SLO-GRO[®]...now more than ever the key to lower mowing and pruning costs.

If rising labor costs are keeping you from doing the kind of mowing and pruning job you know should be done, maybe the answer you're looking for is Slo-Gro.

Slo-Gro is a unique chemical growth retardant that economically controls the growth of trees, grass, shrubs and ivy. In tough-to-control areas, Slo-Gro can usually do the job

better, and at less expense than mechanical methods.

It's fast, systemic, safe, and produces no persistent residue. For complete details write: Uniroyal Chemical, Division of Uniroyal, Inc., Naugatuck, CT 06770.

As with any growth regulant, always follow instructions on the label.



Roadside Grass Control. Slo-Gro is recommended for use on all "commercial" turf areas that require regular maintenance, but are difficult to mow. Maintenance situations like highway medians, airfields, steep embankments, ditches, and grassed areas around fences and guard rails.



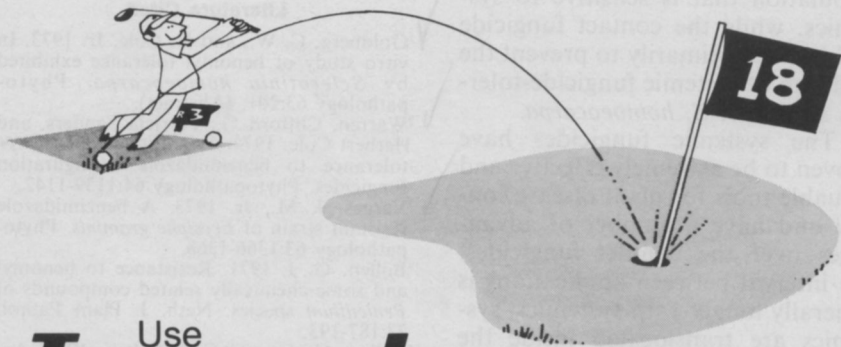
Growth Control on Trees. Slo-Gro inhibits tree growth by stopping the terminal growth of woody plants. Primary applications include control of tree size under power lines, along streets, or wherever excessive foliage is a problem.



Golf Course Maintenance. While Slo-Gro is not recommended for general use on fine grass areas such as residential or commercial lawns, it has been used extensively on golf course roughs. It can also be used in conjunction with herbicides wherever weed control is required.

Control your fungi problems

FROM TEE TO GREEN



Use **Terrazole**[®]

To Fight Cottony Blight, Grease Spot,
Damping-Off

Terrazole soil fungicide is your best weapon against Pythium fungi—the cause of grease spot, damping-off and cottony blight in your turf.

With a case of Terrazole in your storage shed, you're set to act fast at the first sign of these turf diseases. Terrazole goes to work quickly and provides effective control of the problems caused by both Pythium and Phytophthora. Repeating at 5 to 10-day intervals provides preventive control. Keep your best weapon against Pythium on hand. Keep your greens green, your golfers happy.

Use **Terraclor**[®]

To Control Brown Patch

Terraclor soil fungicide is the answer to Rhizoctonia control—the fungus that contributes to the formation of Brown Patch in Southern turf grasses.

Terraclor is easy to apply in liquid or dry granular form. Usually one application at the first sign of disease is all it takes.

Be sure you have Terraclor on hand. It's good assurance for healthy fairways and greens.

Write for complete information.

Mr. D. H. Sparks, Agricultural Division OLIN,
P. O. Box 991, Little Rock, Arkansas 72203

Please send me more information on
Terrazole/Terraclor for a healthy turf.

The rare bird in the business



Name _____

Address _____

City _____

State _____ Zip _____

CAUTION: As with any pesticide, read the label carefully; follow directions.

NEWS (from page 44)

Budworm Target of Maine's *Bacillus Thuringiensis* Tests

Biological insect control may be put to an important test this spring as the Maine Agricultural Experiment Station plans to combat a massive outbreak of spruce budworms in the northern part of that state with aerial applications of *Bacillus thuringiensis* (B.t.).

According to John Dimond, a professor of entomology at the University of Maine who is heading up the project, present plans call for at least six 1,000-acre test plots using six-, eight- and 10-billion international units of B.t., each applied at rates of one-quart and one-half gallon per acre.

The spruce budworm outbreak, which also afflicts much of the eastern Canadian provinces, is Maine's most serious insect problem. The budworms have infested 5.5 million acres of spruce/fir forests in Maine, 3.5 million of which are serious enough to warrant immediate attention.

Since a budworm outbreak in the late 1950's, the State Department of Forestry has conducted regular spraying programs using Zectran, and experimental use of Sevin last year. The State plans to spray again late this spring, probably also using fenitrothion. The B.t. project test plots will be established in the same general area as the State's control program.

Dimond's project is being well-received by local environmental groups since B.t., composed of live spores, is non-phytotoxic and non-toxic to animals. It is hoped that data obtained in Maine will help substantiate efficacy claims for B.t. and speed up EPA registration for spruce budworm control.

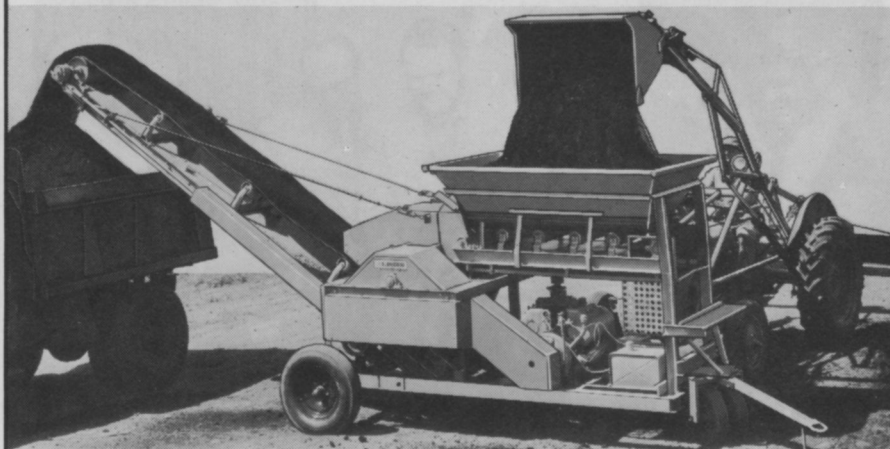
"*Bacillus thuringiensis* is an environmentally preferred method of control. If we can show it to be as effective as chemical insecticides, then we'd certainly think of it as a preferred material to use," Dimond said.

According to Dimond, for best results, B.t. must be applied early, so current plans call for spraying when the tree buds are breaking which would be about the first week of June.

Dimond said B.t. effectiveness

PERFECTLY PREPARED SOIL MIXES

NOW WITH JUST ONE MACHINE YOU CAN SHRED, MIX, AERATE & SCREEN YOUR TOPSOIL, PEAT, CLAY, COMPOST OR SAND.



Lindig offers a size for every application with capacities from 4 to over 200 yards per hour. The Exclusive Hi-Speed Hammermill rapidly turns your material into a uniform well aerated mix — ready for immediate use. Fully portable and available with optional Rotary Screener for a debris-free finished product. *First Choice In Volume Processing.*

LINDIG

MANUFACTURING CORPORATION
Box 105 — 1877 W. County Road C
St. Paul, Minnesota 55113

SEND COMPLETE INFORMATION

Name _____
Firm/Dept. _____
Address _____
City _____
State _____ Zip _____

For More Details Circle (148) on Reply Card

can be measured in two ways. "We'll take a pre-spray and a post-spray count of insects and thus be able to determine the percent mortality," he said.

"After the feeding of the bud-worms, we'll also take defoliation measurements," Dimond explained. "If we can save 50 percent or more of the foliage, the trees will probably live."

The project will mainly involve testing of Abbott Laboratories' B.t., trade-named Dipel. Depending on funding, Dimond said plans may also include testing of Thuricide, another B.t. brand from Sandoz, Inc.; Orthene, an organic phosphate compound from Chevron; Lannate, a carbamate product from DuPont; Cygon, an organic phosphate insecticide-acaricide from American Cyanamid Co.; and a product from Thompson Hayward known as TH640.

New York Arborists Group Elects '75 Officers, Directors

At the annual meeting of the New York State Arborists Association in Syracuse, N.Y., officers for 1975 were elected. Carl Lundborg was re-elected president of the Association. He is a vice president of the F. A. Bartlett Tree Expert Company with headquarters at Westbury, N.Y.

Three vice presidents were also elected: first vice president, D. W. Cadwallader of Hopewell Junction, N.Y.; second vice president, Richard Wickey of Westbury, N.Y.; and third vice president, Jacob Bruinooge of Spring Valley, N.Y. James W. Taylor of Gardener, N.Y., was elected secretary-treasurer.

On the board of directors, Jack A. Schultz of Merrick, N.Y. will serve a one-year term as will Dave Kress of Schenectady, N.Y., and Sam Blakley of Mt. Vernon, N.Y. For two-year terms, Philip Brogan of Syracuse, N.Y., and Leo Cook of Vestal, N.Y., were chosen. For three-year terms, the Association selected Raymond Smith of Buffalo, N.Y., and Vincent Cirasole of Bay-side, N.Y.

Margaret Herbst, with headquarters at 101 Park Ave., N.Y., N.Y., was reappointed executive secretary.

(more news on page 52)

Root-App...A New Subsurface Tree Feeding System

A new way to increase your tree care business... With Root-App, one man can feed more trees per day with less effort than any other method.

Root-App does the work, not the operator. Stones, hard pans, clay or frozen ground...no problem. Root-App is...portable, simple to operate and it's automatic. Above all, it's the fastest root feeding system available anywhere. One man can feed a 10" diameter tree in less than 3 minutes. Concentrated liquid fertilizer is injected as deep as 16 inches with no fuss and no mess. Less holes are required with Root-App as the high pressure radial injection penetrates more soil area.

Send for more information now...

Applied Imagination

Belle Mead, New Jersey 08502
609-448-1004





The Southern Weed Science Society elected new officers for the coming year at the Society's recent 28th annual meeting in Memphis. New officers are: (Standing, from left) L. McCormick, Louisiana Extension Service, Baton Rouge, La., member at large; William G. Westmoreland, Ciba-Geigy Corp., outgoing president; Roy J. Smith, USDA-ARS, Stuttgart, Ark., member at large; Wayne Wright, Dow Chemical Co., member at large; Dr. Robert Frans, University of Arkansas, constitution and operating procedures chairman; (seated, from left) Dr. J. B. Weber, North Carolina State University, editor; Dr. Paul W. Santelmann, Oklahoma State University, president; Dr. A. J. Becton, Funk Seeds International, president-elect; Dr. Gale Buchanan, Auburn University, vice president; and Dr. Howard Greer, Oklahoma State University, secretary-treasurer.

Air Products Expands With 250 Ton/Day Ammonia Plant

Air Products and Chemicals, Inc., said it will expand ammonia production capacity at the company's New Orleans, La., facility with the addition of a 250-ton per day ammonia plant. This new capacity is expected to be on stream in January, 1976.

Ammonia is expected to continue in worldwide short supply into the late seventies. The United States produces about 16 million tons of ammonia annually. Approximately 75 percent of domestic consumption is used in fertilizer products.

Since a grass roots ammonia facility could take approximately three years to complete, Air Products purchased certain idle ammonia production equipment which is being used in this expansion. These otherwise long lead time items will make it possible for the new plant to be in production in approximately one year.

(more news on page 54)

PRINCETON



Models available in 16", 20", and 24" cutting widths. Our Harvester cuts and palletizes slab sod at a minimum cost and with maximum employee efficiency.

**THE LEADER IN
EQUIPMENT FOR THE SOD INDUSTRY**

PRINCETON MFG. CO.

2625 Johnstown Road
COLUMBUS, OHIO 43219
Tel. (614) 475-8520

For More Details Circle (168) on Reply Card

Herd's TWO NEWEST BROADCASTERS

for the **COMMERCIAL OPERATOR**
and **HOMEOWNER**

NEW 750
9.6 BU., 750 LB.
CAPACITY
FOR THE
LARGER BROAD-
CASTING JOBS



NEW GT-77
77 LB. CAPACITY
FOR GARDEN TRACTORS

Write for catalog describing all seven HERD models

HERD SEEDER CO., INC.

P. O. BOX 448, DEPT. 173, LOGANSPORT, IND. 46947

For More Details Circle (150) on Reply Card

WEEDS CHOKING YOUR LAKE?

Whatever your lake fun, it's MORE fun when you don't have to contend with smelly, unsightly and cumbersome water weeds.

AQUATHOL® K

controls water weeds — fast, efficiently, economically . . . and without harm to the environment or fish when applied as directed. **AQUATHOL K** may be easily applied* to control water weeds around docks or lakefront beaches. For your free weed identification guide and the name of the **AQUATHOL K** supplier in your area, write: Weed Identification Guide at the address below.



Before using be sure to read and follow directions and precautions on the label of the product

*Many states legislate chemical use in water. Check with your dealer.

PENWALT
AGCHEM

AGRICHEMICAL TECHNOLOGY
173 SOUTH CALIFORNIA AVENUE
MONROVIA, CALIFORNIA 91018 • (213) 558-1838

For More Details Circle (164) on Reply Card
54

NEWS (continued)

Turf Fertilizer Supplies O.K. But Prices Higher Than '74

Fertilizer supplies for home lawns, golf courses, and parks should be adequate this spring but higher in price than last year, said a faculty member of the College of Agriculture at The Pennsylvania State University. Dr. Donald V. Waddington has studied the situation and reported his findings at the 45th Michigan Turfgrass Conference held recently in East Lansing, Mich.

A check of typical turfgrass fertilizers showed price increases of 60 to 67 percent since last spring and 29 to 35 percent increases since last July, he said.

As an example, a 10-6-4 fertilizer with 25 percent slow-release nitrogen increased from \$130 per ton in the spring of 1974 to \$162 in July, 1974, and then to \$212 by January of this year. Obviously, rising costs for materials and manufacturing are passed along to buyers.

Describing increased costs for two special slow-release nitrogen fertilizers, ureaform and IBDU, Waddington said ureaform prices have increased by about 60 percent in the last two years, while costs for IBDU have doubled. In studying the fertilizer market, Waddington, associate professor of soil science at Penn State, contacted representatives of major turfgrass fertilizer manufacturers and some of the largest distributors in Pennsylvania.

According to one manufacturer, the homeowner who paid about \$8.80 in 1972 to fertilize an average lawn of 8,000 square feet will be faced with \$14.40 for one application of the same material in 1975. Two or three applications a season are generally recommended. Thus, some fertilizer suppliers expect a decline in buying by the average homeowner.

People who buy in large quantities, such as superintendents of golf courses and parks, may not always get the exact fertilizer grade or ration they want and deliveries may be delayed, Waddington said. If delivery is delayed, be prepared to pay the price being asked at delivery

(continued on page 60)

BACILLUS THURINGIENSIS:

Its Properties And Manufacturers

B.t. is a natural bacterium, *Bacillus thuringiensis*.

When gypsy moths or other caterpillars ingest foliage sprayed with B.t., their digestive mechanisms are disrupted and the pests immediately stop feeding. Death follows from within three hours to three days.

Unlike the organic chemical insecticides, this compound controls only Lepidopterous larvae — the group which includes worms such as gypsy moths, tent caterpillars and inchworm. It is not harmful to desirable insects, animals, fish, humans or plants.

Larvae which have died are not dangerous, either. Tests have shown that birds and other predators readily eat and thrive on sprayed larvae.

B.t. is manufactured as Thuricide by Sandoz Wander; as Dipel by Abbott Laboratories, Chicago, Ill.; and as Biotrol XK by Thompson Hayward.



Shaw's
bags it!

NITROFORM*
organic nitrogen

The slow-release nitrogen that nourishes for months and months without repeated application.

STH75-4



Turf and Horticultural Products, Synthetics Dept.
Wilmington, Delaware 19899

*Registered trademark of Hercules Incorporated

For More Details Circle (169) on Reply Card
WEEDS TREES and TURF

NEWS (from page 54)

time rather than at ordering time, he said.

Waddington suggested several ways to cut fertilizer costs. Quick-release or soluble fertilizers furnish nitrogen at lower costs than the slow-release types. If a switch to solubles is made, adjust the rate and timing of use to avoid fertilizer burn or overstimulation of growth from quick-release fertilizers.

In buying different fertilizer

grades with the same ratio of nitrogen, phosphorus, and potash, a higher analysis such as 16-8-8 is normally a better buy than the same ratio at 10-5-5. This is due to a lower cost per unit of plant food, less material for handling and storage, and lower shipping costs.

Dry products are less costly than liquid fertilizers, Waddington said. Blends may be lower priced than granular or pelleted fertilizers. However, separation of materials due to

size or density differences is a problem with some blends. Higher costs for granular or pelleted fertilizers may be justified, he said, in order to obtain a balanced distribution of nutrients with spinner-type spreaders.

Homeowners should look for discounts during early season sales campaigns or late in the season. Above all, have the soil tested to determine the need for nutrients.

Turf professionals using large amounts of fertilizer should continue buying bulk supplies, where savings are generally available. Some suppliers will deliver in portable bins if storage space is not available.

Why Not Spray the DEPENDABLE Way ...

SMITHCO

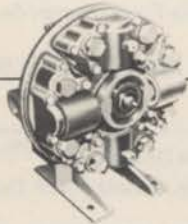
**Why are Smithco Sprayers ALWAYS ON THE GO?
They're dependable ... THAT'S WHY!**

All Smithco Sprayers feature long lasting corrosion resistant fiberglass tanks, (guaranteed for 3 years) centrifugally cast for added strength and appearance. High capacity strainers with stainless steel screen and, mechanical tank agitation. For big jobs select from five models of the HAWK. For smaller requirements there are the LARKS.



A Size for All Occasions

Smithco sprayers are equipped with pumps that produce 10-20-25 GPM up to 800 PSI with tank capacities from 110 to 500 gallons. Available either trailer or skid mounted; gas engine with V-belt drive or PTO; convenient drains, hose and boom outlets.



**The
Golden
Eagle
Pump**

Dependable, four cylinder, positive displacement, short stroke design for pulsation free operation. Plunger cups that are guaranteed for one year, and Timken Tapered Roller Main Bearings guaranteed for two years. Ceramic valves with Nylatron seats. Longer pump life than any other pump.



SMITHCO

MAKES SENSE FOR '75

SMITHCO, INC., WAYNE, PENNSYLVANIA 19087

Missouri Distributor Moves Into 44,000-Sq.-Ft. Building

Robison's Lawn & Golf, Inc., a 30-year-old professional turf maintenance equipment and golf car distributorship, has moved into a remodeled 44,000-square-foot building in Grandview, Mo.

The building is on five acres and serves as Robison's sales and service outlet throughout Kansas and western Missouri. William E. Robison, Jr. and Jack W. Robison co-own the 23-member distributorship which handles RainBird sprinkler systems and Cushman golf cars and turf care equipment.

Hesston's Production Tripled By Move to Larger Facility

The Lawn Equipment Division of Hesston Corporation recently tripled its production capacity and office space by moving its headquarters to a two-year-old building in southeast Indianapolis.

According to Bill Howard, division general manager, the move to the 54,000 square foot facility makes it possible to streamline the division's manufacturing process. The Front Runner grounds maintenance tractor, its attachments and the newly-designed StumpRazor tree stump remover can now be produced simultaneously, increasing the division's ability to fill distributor and dealer orders.

"The move also improves the working conditions of Lawn Equip-

(continued)



Kerr-McGee bags it!

NITROFORM[®]
organic nitrogen



The odorless organic nitrogen. Has predictable performance, too. Try it.

Turf and Horticultural Products, Synthetics Dept.
Wilmington, Delaware 19899

Registered trademark of Hercules Incorporated. STH74-24R

For More Details Circle (156) on Reply Card

ment Division employees and will enable the manufacturing department to reach its desired efficiency objective. The improved efficiencies should result in better quality control, the expanded production of higher quality products at competitive prices and the addition of several new product lines.

"Added space for advanced engineering, research and development is another benefit of the move. A drafting department and indoor field test stand have been added, giving the division a greater capacity to

develop new and innovative grounds maintenance equipment," Howard said.

"The Hesston Lawn Equipment Division also has added a well-equipped fabrication shop which further improved quality control and eliminated long lead times of formerly purchased parts. Warehouse facilities have been consolidated and the service parts department has been greatly expanded, resulting in the increased efficiency of shipping and receiving," Howard said.

(more news on page 64)



This new Hesston Lawn Equipment Division facility more than triples the division's production capacity and office space.

**BUILT LIKE
A ROCK**
...Only Stronger!

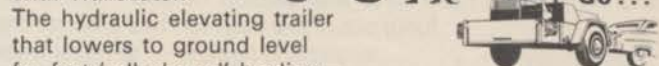
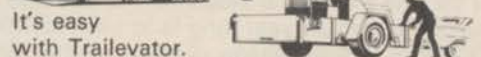


"Buntun lawn-turf equipment is built to take a beating... it's tough! It's built to cut grass, even in the hard to get to places. Even a shove off the back of a truck can't damage the heavy-duty 12 gauge steel frame and cutter housing." So listen to Rocky Graziano... send for more information today... with Buntun, you can't lose! Available from 8-inch to 52-inch cut.



BUNTON CO. 4303 Poplar Level Road, Louisville, Kentucky 40213, U.S.A.
Phone 502/459-3810 Telex 204-340

One Manhandling



It's easy with Trailevator. The hydraulic elevating trailer that lowers to ground level for fast 'roll-aboard' loading—then lifts its own load to hauling position in just seconds. Handles loads up to 3,000 lbs.*; lifts and lowers without uncoupling from the towing vehicle. Standard trailer hitch quickly attaches to car, truck or tractor. Try a one-man Trailevator. It'll make you a one-trailer man.

Magline, Inc., Pincanning, Mich. 48650, P.O. Box 263

*Other Models to 5,000 lbs.



The Hydraulic Elevating Trailer

For More Details Circle (109) on Reply Card

WEEDS TREES and TURF



Chippit®

OUR TWO-MOUTHED GOAT CAN CHEW UP JUST ABOUT ANYTHING ... EVEN A 3" TREE

LIMB. Solve all your yard-debris problems with one 8 h.p. machine. Limbs and brush fed into its rear hopper are sliced into chips and neatly bagged. Leaves and vines placed in the other hopper are shredded into useful mulch or compost material.



For Further Information Contact
BILLY GOAT INDUSTRIES, INC.
 P.O. Box 308, Lee's Summit, Mo. 64063

Name _____
 Address _____
 City _____
 State _____ Zip _____

For More Details Circle (106) on Reply Card

NEWS (continued)

ProTurf Introduces Blends For Winter Overseeding Use

The ProTurf Division of O. M. Scott & Sons, headquartered in Marysville, Ohio, has introduced two new seed blends specially designed for use in winter overseeding. The announcement was made by Dick Spitler, ProTurf's southern regional manager.

According to Spitler, the new blends are named WinterGreen I and WinterGreen II. WinterGreen I is a blend of Manhattan and Penn-fine perennial ryegrasses and Victa Kentucky bluegrass. WinterGreen II is a blend of Highlight fescue, *Poa trivialis* and Seaside bentgrass. Both blends are reported to be better than 99.9 percent weed-free.

Spitler said the new overseeding blends were developed and tested at Scotts' two southern research field stations (in Florida and Texas) and on several golf courses throughout the South. Both blends are available through ProTurf technical representatives in the South.

Missouri Foresters Studying Causes of Wood Separation

Foresters in Columbia, Mo., are looking "inside" wood to see if they can eliminate some of those defects that might "shake" Missouri's walnut prominence.

"Shake" is the word given to those separations in wood caused by anything in the tree's environment from a logging injury to an over-zealous sapsucker. And they can be quite serious, since Missouri ranks first in the nation in walnut lumber, production of walnut gunstocks, the processing of walnut meats, and the growing of young walnut trees. The state also ranks high in the production of walnut novelties and veneer.

To discover the cause and cure of walnut defects, University of Missouri-Columbia (UMC) scientists now have their own drying kiln on campus in which over 1,000 potential gunstocks (blanks) are being monitored.

A "blank" is a piece of wood cut in the general shape of a gunstock. It is about three inches thick and its ends have been dipped in wax so they don't dry out faster than the rest of the blank in the kiln where

they are seasoned for up to six months.

"If we can identify the cause of the checks and shakes in the wood, we should be able to improve walnut quality," said E. Allen McGinnes, UMC forestry researcher.

"For example, some of the defects may be coming from poor soil quality. If that's the case, we could amend the soil or otherwise change it to correct the problem," he said.

McGinnes and John Phelps, research associate, are also examining the fundamental properties of the walnut to see why it behaves the way it does.

"Wood separation occurs in living trees," said Phelps. "It's usually caused by some sort of injury."

The unknowing "culprits" are often loggers, hunters and birds. Of the birds, the sapsucker would probably be rated public enemy number one because of its fondness for sap and insects on walnut trees.

To study wood damage, Phelps soaks the wood in boiling water to soften it. Then he cuts an area

Got a problem with

SAND?

Sand in your water.

Now there's an easy, low-cost way to take sand out of your water. With a Laval Separator. There are no screens, no filters, no backflushing, no maintenance or cleaning. Just results.

There's a Laval Separator for every purpose. For farms. For sprinkler systems. For schools. For irrigation systems. For submersible and turbine pumps. For industry. For you. Whoever you are. Write us now and we'll send you complete information.



1899 N. Helm, Box 6119, Fresno, CA. 93727, Dept. 106

For More Details Circle (108) on Reply Card

WEEDS TREES and TURF

around the shake and looks at it under a microscope. Using different stains to enhance the cellulose and lignin in the wood so he can see things better, Phelps magnifies wood cells up to 2,000 times to learn the difference between normal and abnormal cells.

"Once we learn the cause of these abnormalities," he said, "we'll be able to suggest preventive measures, in logging, for example."

McGinnes said the UMC research could have a big impact on the Missouri walnut industry. "Everyone gains when we can keep walnut trees in shape," he said. "That eliminates a lot of waste and faulty products."

It could even mean more veneer trees — the ones that make a perfect log that can be thinly sliced and used for fine-crafted furniture.

"Everyone hopes he has one of those valuable trees in his backyard," McGinnes said. "The truth is, though, there are a lot more \$10 trees than there are \$10,000 ones."

FMC Division To Sponsor Display Contest for Dealers

FMC Corporation's Outdoor Power Equipment Division, located in Port Washington, Wis., has announced plans for a dealer display contest for the 1975 selling season. The division manufactures the Bolens line of lawn and garden equipment.

To be eligible for the contest, dealers must display a minimum of five 1975 Bolens products. The dealers will be using materials available from the division. Judging for the contest will be done by an independent agency during a period from April 1 to June 1.

Participating North American dealers will be competing for awards for the most attractive, informative and effective displays of Bolens products. Over \$5,000 in prizes will be awarded, and all participants will receive a set of Bolens glassware.

New Publication Announced By Shade Tree Conference

Green Industry treemen now have a new publication available to them — the *Journal of Arboriculture*.

Published by the International Shade Tree Conference (ISTC), the monthly Journal will contain educational, technical and scientific papers of value to those who select, establish and maintain shade and ornamental trees.

The ISTC is not new to the field of publishing arboricultural information. They have published *Arborist's News* for 458 consecutive

months and the proceedings of their annual meeting for 45 consecutive years. Both of these publications are replaced by the *Journal of Arboriculture*.

The Journal is available by subscription to individuals or libraries. Interested in obtaining the magazine? Contact E. C. Bundy, ISTC, P.O. Box 71, Urbana, Ill. 61801.

Now, Exhalt800 Prolongs Pesticide Effectiveness; Exhalt4-10 Stops Excessive Moisture Loss.

You need both new Exhalt products to keep your turf and plants in top condition all year long.

Exhalt 800 Sticker-Extender. Even if it rains in an hour, you still get full extender activity, full pesticide effectiveness. Encapsulates and holds pesticides on turf or plant foliage; stops wash-off and weather erosion. Even flexes with leaf growth for longer action! And it reduces pesticide build-up in the soil.

Exhalt 4-10 Anti-Transpirant. Extends transplanting season, even

during active growing weather.

Minimizes effects of summer droughts, high temperatures and drying winds. Keeps grass in better condition! You don't have to agitate it during use, so you save time.

Both are simple to use. Both formulated for economical dilution ratios. Both mix with water—and you need only water to clean equipment. With Exhalt, messy clean-ups become a thing of the past.

Find out more. Write for our literature. Distributor inquiries welcome.



Exhalt

800 Sticker-Extender 4-10 Anti-Transpirant for plants and turf



Kay-Fries Chemicals, Inc.
Crop Protection Division
Stony Point, N.Y. 10980