

devices involve higher production costs, however, and one — the propane flamer — most likely involves increased incidence of disease.

Helps Reduce Costs

- Burning of annual crops—annual ryegrass and cereal grains—is an advantageous practice primarily because it helps reduce production costs. Disease control is not as necessary a consideration as it is with perennials. These annual crops account for an estimated 55% of the acreage and two-thirds of the residue tonnage now being burned. A few varieties of annual ryegrass are vulnerable to diseases presently controlled through field burning. Too, a satisfactory alternative way has not yet been found to control weeds in annual ryegrass.

- Straw removal by some means is vital for both perennial and annual crops. With perennials, removal appears essential for successful production of all species. With annuals, the most feasible alternatives to removal by burning are soil incorporation and mechanical removal. Large residue tonnages and the heavy, wet-type soils commonly used to produce annual ryegrass make satisfactory incorporation very difficult to achieve with this crop. Mechanical removal, of course, requires that uses be found for straw residues, since they otherwise would become a solid-waste pollutant.

- Straw residues can be used to make various industrial products, such as plastics and pulp for paper, although there are technical and economic hurdles involved. A recently developed microbial process could facilitate many utilization possibilities. The most promising and immediately available use for straw residues, however, appears to be a livestock feed.

- It may be possible to grow crops that do not require burning on at least a portion of the lands now devoted to grass seed production, though a very considerable investment, as well as developments of markets, would be required.

Engineer R. W. Boubel, crop physiologist D. O. Chilcote, and E. M. Bates, U.S. Weather Bureau agricultural meteorologist stationed at OSU, are evaluating the many meteorological and agronomic variables involved in field burning. It is hoped these variables can be combined into a series of mathematical models which, when computerized, will enable more rapid and precise predic-

tion than now possible of when, where, and how much growers should burn on a given day. Also engaged in this effort are atmospheric scientists E. W. Hewson, L. E. Olsson, and W. P. Lowry.

Mobile Incinerator

A mobile incinerator, now being developed by agricultural engineers R. W. Bonlie and G. E. Page, appears a promising alternative to open burning and also may possess some advantages over propane flaming. For with this unit, which Chilcote and the engineers will test this coming summer, the flame can be kept under control. Better combustion and, thus, reduced smoke and particulate output should be achieved. Good field sanitation also should be accomplished, since residues are burned right on the ground. Projected capacity of the incinerator is from two to five acres per hour. Such a unit, though, probably would be quite costly — perhaps from \$15,000 to \$25,000.

J. R. Hardison, U.S. Department of Agriculture plant pathologist stationed at OSU, is testing a wide variety of chemicals in hopes of finding some materials that will check

the major diseases so effectively controlled by burning. He has found that soil applications of an experimental systemic fungicide will provide direct chemical control of ergot and blind-seed. The material would be expensive, however, and large dosages would be required.

In search of satisfactory herbicides and other methods of weed control — particularly in annual ryegrass — are W. O. Lee, U.S. Department of Agriculture agronomist stationed at OSU, Chilcote, and agronomist A. P. Appleby. The most promising herbicide found to date for controlling weeds in annual ryegrass at the time of establishment is a compound known as paraquat. However, this material is quite costly and also can be toxic to humans.

W. J. Bublitz, pulp and paper chemist, has learned that a pulp satisfactory for manufacture into certain grades of paper can be produced from annual ryegrass straw. Yield on a dry basis is about one-half ton of pulp per ton of straw — the same yield as obtained from wood. The paper is superior to that made from Douglas-fir pulp in folding, tensile, and bursting strength. More-

(Continued on Page 46)



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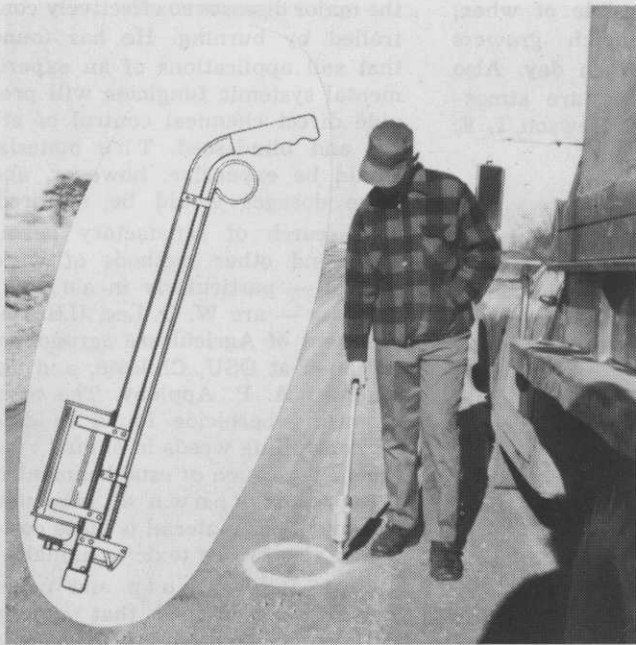
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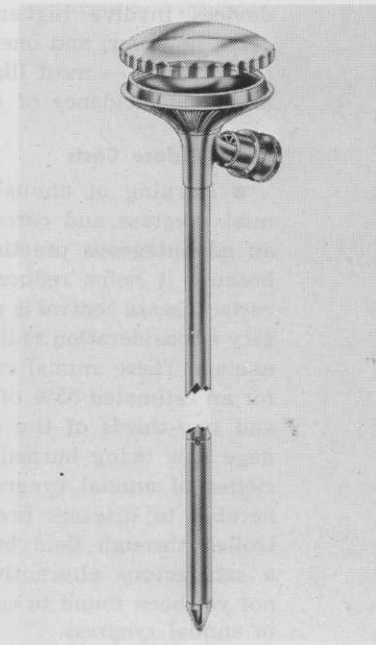
EASY MARKER, Fox Valley Marking Supplies, Bartlett, Ill.

Layout of shrubs and trees is quick and efficient. Easy Marker makes its highly visible mark on grass, soil, pavement and gravel. Lay out hedge lines effortlessly with Easy Marker's unique single-handed operation. Exact shrub and tree placement is a definite plus. Write instructions for the excavation of each hole, giving diameter and depth to be dug. For more details, circle (701) on the reply card.



PRUNING AND WOUND HEALER, Lethelin Products, Mt. Vernon, N.Y.

Lethelin Treatment No. 2 is an aerosol spray to replace hard-to-brush-on tar. It holds tree sap loss to a minimum to induce fast, sound healing. Can be used after treating borer-infected tree with Lethelin Borerkil by sealing in insecticidal vapors. For more details, circle (702) on reply card.



JET FEED ROOT FEEDER, Universal Metals Products, Inc., Coopersville, Mich.

Equipped with a jet point, the rod is easily inserted into the ground with water pressure. Effective for watering trees, flowers and shrubs. Jet Feed fertilizer tablets available, both for acid-loving plants and for alkaline soil areas. For more details, circle (703) on the reply card.



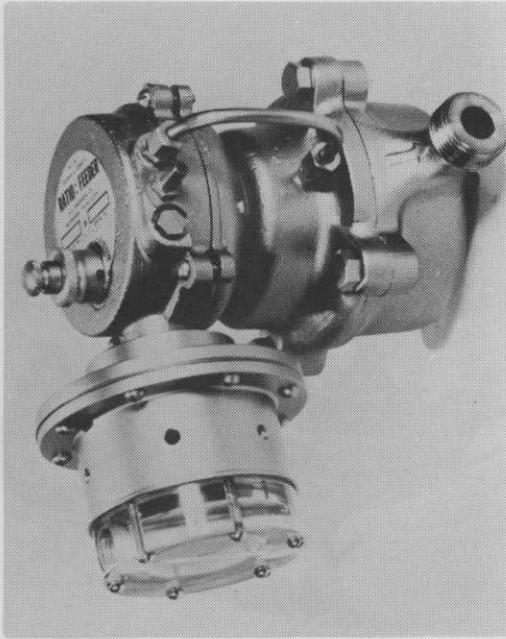
CONWED TURF ESTABLISHMENT BLANKET, Conwed Corporation, St. Paul, Minn.

Erosion is checked during turf germination and establishment even on steep slopes and in loose soil. The bonded fiber mulch blanket with a rectangular plastic mesh netting laminated to one side. It's designed to be unrolled and stapled over prepared, seeded soil surfaces susceptible to erosion. This condition often precludes application of loose mulches. When saturated by rainfall, the bonded fibers are freed to form a thick mulch covering held in place by the strong rectangular plastic netting. Protects seeds from rapid moisture loss and temperature fluctuations. Available in 5x200-ft. (111 sq. yds.) rolls weighing about 15 pounds. For more details, circle (707) on the reply card.



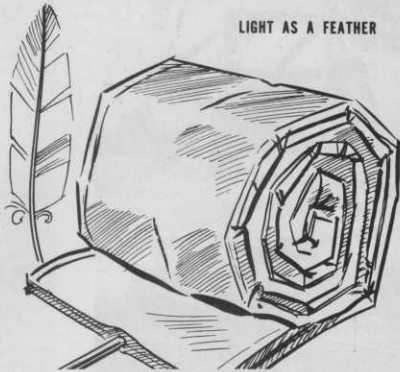
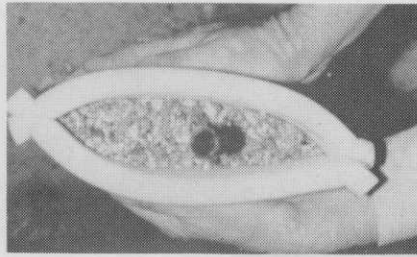
MULTI-PURPOSE EPOXY, Tescom Corporation, Minneapolis, Minn.

MINIT-CURE, is a multi-purpose epoxy that has a complete curing time of less than 60 seconds. Suitable for jobs requiring fast curing time at around 75-degrees. It can be used to bond metals, woods, plastics, rubber and glass. MINIT-CURE has a tensile strength of 2900 psi. For more details, circle (708) on the reply card.



FERTILIZER FEEDER FOR WATER LINES, H. E. Anderson Co., Muskogee, Okla.

Model DD Ratio: Feeder for automatic fertilizer injection into feed water lines has these advantages: completely water-operated; functions over wide range of water flows; operation begins on very low water flows, exactly proportions fertilizers to varying water flows regardless of water pressure (within equipment limits 10-125 psi); For more details, circle (704) on the reply card.



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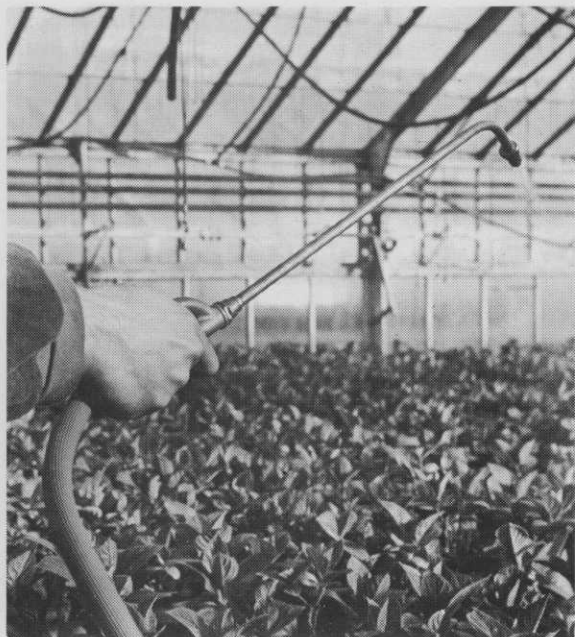
AQUADRAIN SYSTEM, Hydrophilic Industries, Ltd., Puyallup, Wash.

Aquadrain has been used by railroads and highways under fills as high as 40 ft. Suitable for golf course drainage or seepage problems. Aquadrain is a perforated plastic pipe surrounded by a filter material encased in a lightweight pervious filter envelope. For more details, circle (705) on the reply card.



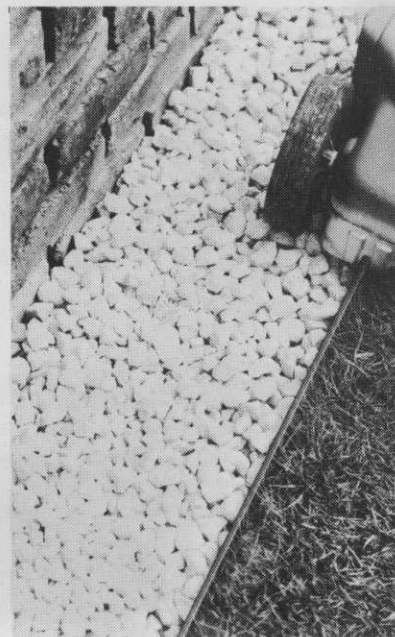
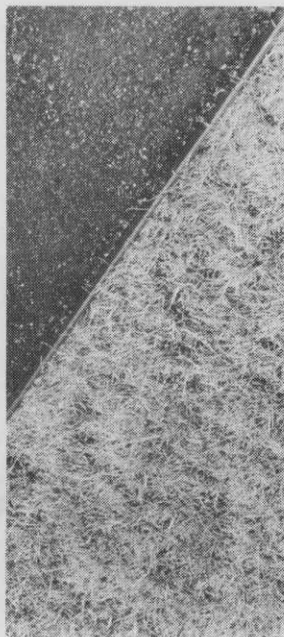
GOLF COURSE TOP DRESSING, Oil-Dri Corporation of America, Chicago.

Made of virgin montmorillonite, particle size — 1/20" to 1/50". Ph is 6.25. It's sterile, inorganic, non-toxic, and non-caustic. Reduces compaction. Increases drainage. For more details, circle (706) on the reply card.



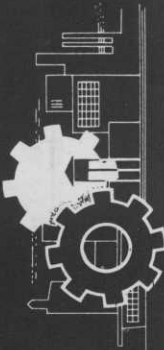
PROTECT HANDS FROM SKIN IRRITANTS, Ayerst Laboratories, New York City.

Rashes and other allergic reactions are sometimes caused by skin contact with insecticides and herbicides. Barrier cream, KERODEX is used to prevent skin contact. Two types are available. KERODEX No. 71 protects against insecticides in aqueous solution (also helps protect against poison ivy, oak or sumac). KERODEX No. 51 is for dry oil work, such as oil sprays, pesticide powders, etc. For more details, circle (709) on the reply card.



STEEL LANDSCAPE EDGING, Joseph T. Ryerson & Son, Inc., Chicago.

Ryerson steel landscape edging is made from crackproof, rotproof steel plate and finished with a thick coat of paint. It's designed to reduce grounds maintenance costs around driveways, athletic running tracks, parking areas, pathways, flower beds, and landscape bordering. Lawnmowers roll right over it. Comes in three weights—1/4" thick by 5" deep; 3/16" by 4" deep; 1/8" by 4" deep. The 1/4 and 3/16 inch units are available in 16-foot interlocking sections; 1/8" unit in 20-foot interlocking sections. For more details, circle (710) on the reply card.



New Products



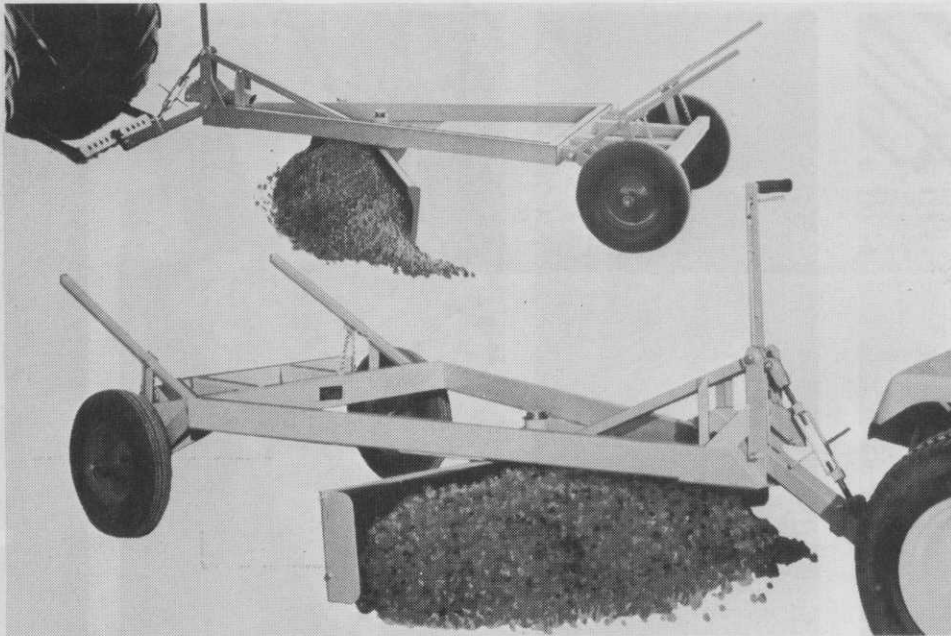
MULTI-SPRAYER, Fargo Foundry Steel and Mfg. Co., Fargo, N.D.

Unit is designed for complete weed control. It mixes and applies invert emulsions for drift control, also applies conventional sprays. A jet-pipe disperser speeds up thickening of invert emulsions. Uses 500-gallon tank; features 16¾-foot boom with 10 nozzles. Can be regulated from operator's seat on trailer or from pick-up truck. Rear boom provides 50 feet of coverage, 25 on each side. For more details, circle (711) on the reply card.



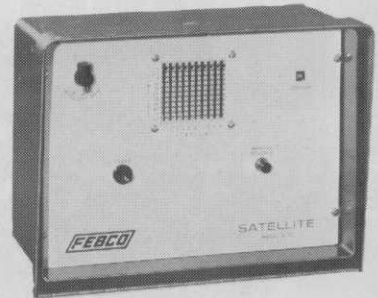
GREENSMaster THREE, Toro Manufacturing Corp., Minneapolis, Minn.

This new triplex riding mower gives golf greens a ribbon cut faster, cleaner, more efficiently than other mowers. Cuts 58-inch swath. Capable of cutting the average 18-hole golf course in three to four hours. Mows at speeds of 1½ to 3½ mph; and in transport, 3½ to 8 mph. Turns 50-60% tighter than competitive units, says Toro, and has height-of-cut change from ⅛-inch to 15/16-inch. In tightest turn, unit leaves uncut circle of 30 inches in diameter. For more details, circle (712) on the reply card.



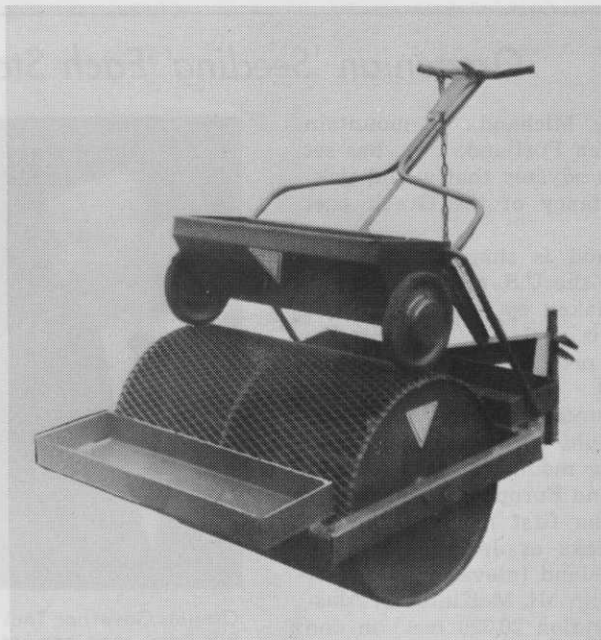
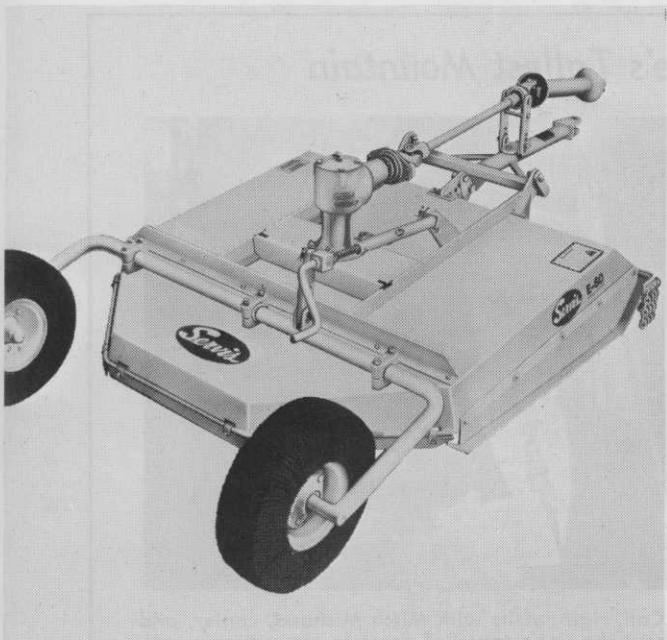
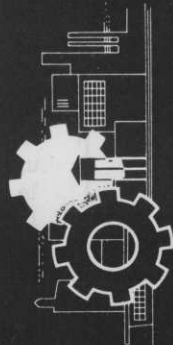
MINI LAND LEVELER, Full Vision, Inc., Newton, Kan.

The unit is designed for compact tractors. With minor adjustments, the blade converts from leveler to grader. For leveling, the Mini Land Leveler blade is set straight with end plates attached. Adjustable in ¼" increments, the blade removes dirt from high areas and carries it to lower areas. Patented independent wheel suspensions and frame construction carry the blade at a constant depth for full floating action rather than dragging it across the contour of the ground. For grading, pivot-point and pin-lock construction let you adjust the blade angle to 30 and 45 degrees. For more details, circle (715) on the reply card.



MASTER CONTROL WATERING SYSTEM, Febco, Inc., Sun Valley, Calif.

M-2 Master Controller capable of operating 25 satellite controllers. Each Satellite Controller operates 10 stations. System ideal for large area turf irrigation. Master controller automatically or manually starts schedules at any 15-minute interval on 14-day program. Equipped with rain switch override. For more details, circle (716) on the reply card.



TRAILING AXLE INDUSTRIAL MOWER, Servis Equipment Co., Dallas, Tex.

LAND SEEDER, Philsco Products Co., Larned, Kan.

The trailing axle model has been added to the Servis line of E-60 rotary clippers. The E-60 line of five-foot mowers also includes lift-type and center axle, pull-type models. The trailing axle type is ideal for mowing close to obstructions. Dual wheels trail within the 60-inch cutting swath. Designed for work behind single axle wheel-type tractors with draw bar ratings from 20 hp to 40 hp. Optional features include front chain guards, drive line safety shield, and puncture proof sectional tires. For details, circle (713) on the reply card.

The Philsco Land Seeder is for contractors, nurserymen and homeowners. Designed for all garden-type and three-point hitch tractors. Features large diameter roller for more even seeding and better clod-breaking with less clogging. Diamond-shaped grid on the roller surface pulverizes and packs as it lays a pattern of impressions in the soil for the seed to enter. The impressions help decrease erosion on the seed bed. For more details, circle (714) on the reply card.

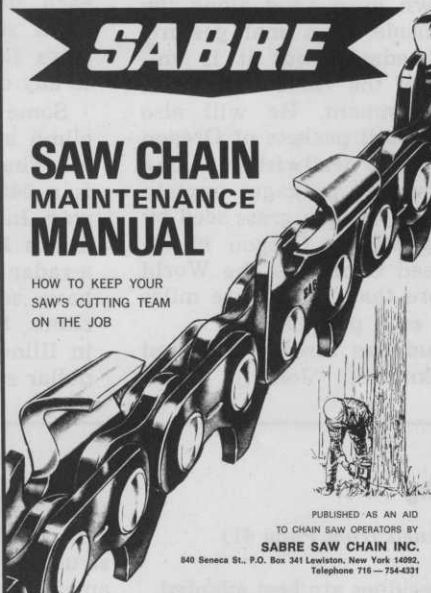


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TRAILER TYPE HYDRO-MULCHER, Bowie Industries, Bowie, Tex.

SAW CHAIN MAINTENANCE MANUAL, Sabre Saw Chain, Inc., Lewiston, N.Y.

This action view at a forest service nursery shows the new Bowie Victor Model 500-gallon, trailer-type Hydro-Mulcher with large flotation tires and baffle for controlled mulching of 54" beds. This model mixes and applies wood-cellulose fiber with seeds or sprigs and fertilizers all at one time. Application with baffle gives closer control and uniformity. Drawbar hitch permits tractor mobility. Also available in 1,000-gallon model, with or without baffle and set of nozzles. Bowie Hydro-Mulchers speed germination and growth and protect new turf against erosion, birds, and moisture loss. For more details, circle (717) on the reply card.

Manual is available free of charge. It describes and illustrates correct methods of filing, lubricating, adjusting tension and repairing saw chain, as well as the care of guide bars and sprockets. A four-page chain check chart illustrates types of unnecessary wear and damage to saw chain and how they can be avoided. For details, circle (718) on the reply card.

New Products

Oregonian 'Seeding' Each State's Tallest Mountain

Mitch Michaud, a mountain man from Portland, Ore., has set upon an odyssey that would tickle the fancy of the Greek poet Homer.

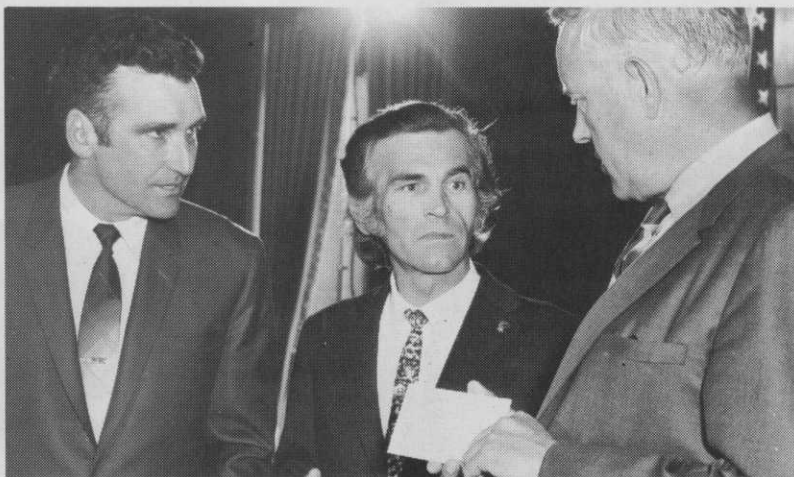
Michaud is shaping a voyage through the U.S. on a trail never before taken by man in a single year. His goal . . . to climb the highest peak in every state during 1970.

A mountain guide by trade, the 40-year-old Michaud has climbed the taller mountains of the United States and Europe and now hopes to be the first man to conquer such peaks as Jerimoth Hill in Rhode Island (elevation 812 feet) along with Mt. McKinley in Alaska (elevation 20,320 feet) in one calendar year. Why?

Michaud explains the high mountains are the last of the pioneer areas where a challenge still exists for man to use his best judgment and knowledge of nature to succeed. It is exhilarating to reach the summit of the high peaks, he explained, where fresh air, bright sunshine and a clean environment abounds.

To assure the maintenance of the mountain ecology, Michaud plans to plant a handful of Oregon grown grass seed along the mountainside. It's a small gesture, Michaud admits, but it is emblematic of the value of grass in our environment. He will also pass out small packets of Oregon grass seed to wellwishers along the route. The packages explain the story of Oregon grass seed by pointedly stating Oregon is the Grass Seed Capital of the World with more than 405 square miles of grass seed production.

Michaud has already acquired the nickname, "Johnny Grass



Oregon Governor Tom McCall, right, visits with Mitch Michaud, center, and Bill Rose, seed grower, about the importance of grass to the nation's ecology. Michaud will distribute the grass seed across the nation during his endeavor to climb the highest peak in each state during 1970.

Seed," since the Oregon Seed Council provided him with several thousand packages of seed to distribute along his route.

Armed with a letter from Oregon's Governor Tom McCall, who has named Michaud official goodwill ambassador for the state, the mountain climber will make personal calls on the governor of each state, where he will offer them suitable varieties of Oregon's famous grass seed for use in any of their state parks.

Some of the "peaks" he will climb aren't really mountains at all. The highest point in Florida is a 345-foot hump in the highway. In Ohio, the 1,550-foot summit is located on a spot housing a radar station and Michaud must have security clearance for the climb. Scaling the highest point in Illinois will cost Michaud one dollar since the site is located on

a farmer's land who charges hikers to enter his property. Michaud was to begin his trek Apr. 6, scaling Moana Kea in Hawaii for the longest climb on his itinerary. The 13,796-foot mountain begins at the ocean's edge. His remaining announced schedule follows:

May 10	Idaho, Mt. Borah	12,662
May 16	California, Mt. Whitney	14,495
May 23	Washington, Mt. Rainier	14,410
June 1	Alaska, Mt. McKinley	20,320
July 4	New Mexico, Wheeler Park	13,160
July 11	Colorado, Mt. Elbert	14,431
July 25	Wyoming, Garnet Peak	13,785
Aug. 1	Montana, Granite Peak	12,799
Aug. 8	New Jersey, High Point	1,803
Aug. 12	Connecticut, Mt. Frissell	2,380
Aug. 15	Massachusetts, Mt. Greylock	3,491
Aug. 17	Rhode Island, Jerimoth Hill	812
Aug. 22	Maine, Mt. Katahdin	5,268
Aug. 26	New Hampshire, Mt. Washington	6,288
Aug. 30	Vermont, Mt. Mansfield	4,393
Sept. 2	New York, Mt. Marcy	5,344

Field Burning . . .

(Continued from Page 41)

over, straw residues are best adapted to the soda pulping process which is virtually odorless. The paper is quite low in tear strength, however.

Agricultural chemist V. H. Freed and other workers at the OSU Environmental Health Sciences Center have found that various industrial raw materials can be extracted from straw residues. Among them are lignin, pentosans, waxes, and in particular, cellulose, which can be used

to make a wide range of acetate plastics. Straw also can be used to make such products as a high density construction board and an organic soil amendment.

A new process developed by microbiologist D. A. Klein and his associates could solve many of the problems involved in both utilization and disposal of straw residues. For it makes possible rapid and controlled microbial breakdown of straw, as well as other lignin-containing materials. The process, called photofermentation, essentially consists of exposing the straw

first to intense light energy, then to selected types of fungi or bacteria.

Perhaps the most promising potential use of straw residues found to date is as a feed for livestock. In feeding tests conducted by animal scientist A. T. Ralston with replacement heifer calves, ryegrass pellets supplemented with molasses, urea, and barley have produced average daily gains of 1.74 pounds at a cost of 13.3 cents per pound. And pellets containing equal amounts of wheat chaff and alfalfa also have produced average daily gains of 1.74 pounds on steer calves.

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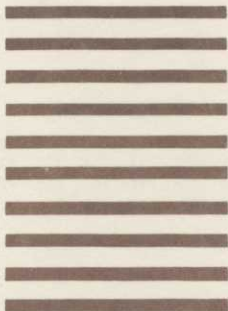
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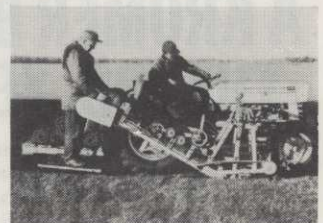
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THATCH

What a Maryland Agronomist Recommends

For several hundred years, thatch has been used successfully to offer shelter for man and animals. If thatch can protect life from the elements such as rain or snow, heat or cold, it must be considered an insulator or sealant. Therefore, suggests A. J. Powell, University of Maryland agronomist, is there any doubt that the accumulation of thatch on turf may also protect the soil from these elements?

When used as human shelter, thatch is generally composed of reeds, rushes, or grasses (especially straws) that are combed or oriented so the long blades lie parallel for a very close fit.

Many lawn maintenance operations tend to give the same effect, said Powell, to the tightly intermingled layer of partially decomposed or undecomposed leaves, stems and roots which accumulate beneath the actively growing grass.

Mowing continuously in the same directional pattern, heavy irrigation and fertilization, use of vigorous species, failure to remove clippings, and delayed mowing are practices that most often causes rapid build-up of the organic layer at the soil surface.

In effect, Powell said, thatch decreases the aggressiveness of turfgrasses by restricting the movement of water, air and fertilizers into the soil. Irrigation water and light or rapid rainfall can be completely repelled by this organic layer.

If thatch prevents water from reaching the soil surface, Powell explained, rooting depths will be shallow and a drought-susceptible condition will exist.

Also sheltered by the thatch are many turfgrass disease organisms and insects. Control is then made very difficult because of the high pest incidence and in-

ability to get the pesticide to the organism causing the problem.

Thatch is much easier to prevent than eradicate. Thatch seldom becomes a problem in less than four years after lawn establishment; and with low or medium maintenance, thatch may never accumulate.

To approach the thatch problem, Powell recommended, decide which type of program is needed: (a) preventive control to avoid excessive build-up or (b) curative control for an existing thatch problem. Generally if the thatch layer is over 1/2 inch thick, the curative control is necessary.

From the preventive maintenance approach, Powell advised moderate fertilization, periodic mechanical thatching and clipping removal should be considered. Also the soil pH should be maintained between 6.5 and 7.0 to help create an environment that is favorable for microorganisms which help decompose the organic material.

For curative control, remove as much thatch as possible and as often as possible without perma-



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Dates for this column need to reach the editor's desk by the first of the month preceding the date of publication.

Annual Southern California Turfgrass Institute, main theater at California State Polytechnic College, Pomona, May 19-20.

Ohio Forestry Association Paul Bunyan Show at the Ohio State Fairgrounds at Columbus, May 22-24.

Outdoor Living Review, Ohio State University, Don Scott Airport Grounds, June 5 and 6.

22nd Annual Nurserymen's Refresher Course, sponsored by the California Association of Nurserymen at Cal Poly, San Luis Obispo, June 9-11.

Purdue-Michigan State Weed Day at Agronomy Farm, Lafayette, Ind., June 18.

Penn State Field Day, formally dedicating the Joseph Valentine Turfgrass Research Center, June 24 and 25.

Ohio Chapter, International Shade Tree Conference, at the USDA Shade Tree and Ornamental Plants Laboratory at Delaware, Ohio, July 8.

Hyacinth Control Society at the Sheraton Motor Inn, Huntsville, Ala., July 12-15.

American Sod Producers Association 4th annual conference and field day, Ramada Dorchester Inn, Dolton, Ill., and the H & E Sod Farm, Momence, Ill., July 28-30.

nently damaging the desirable grasses. It should be removed only during periods of rapid growth, e.g. for bluegrass and fescues—spring or early fall; for bermudas or zoysias—late spring or summer. When thatching is not too severe, the desirable grasses will immediately cover over the scarred areas and prevent weed invasion.

Although hand-raking is often tried and may help prevent thatch formation, Powell said, it seldom

is vigorous enough to remove the 80 bushels or so of thatch that may exist on a lawn. Machines for mechanically removing thatch basically consist of a reel having blades, knives, or tines which revolve in a plane that is vertical to the ground. They vary in size, power, depth of penetration and width between blades on tines. Thus, the amount of thatch removed and the damage to desirable grasses are variable.

Toro Expanding Again

Toro Manufacturing Corporation, Bloomington, Minn., is expanding its headquarters office space by two-thirds. Groundbreaking began in February and completion is expected by early July. The expansion is the second in less than a year. Work on the Toro plant in Windom, Minn., has just been completed, virtually doubling manufacturing and office facilities there.

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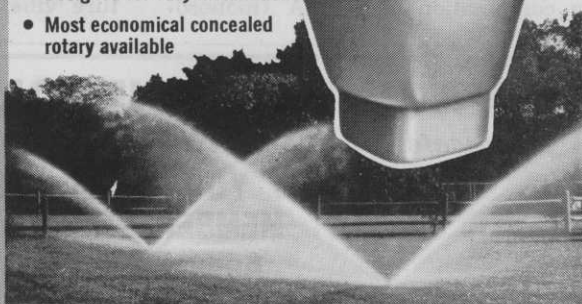
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Cattle Thrive on Hyacinth and Hydrilla in Florida Test

"Everyone laughed at the idea of harvesting waterweeds, grinding them up, and using them for cattle feed," says a University of Florida animal scientist. "But after a year of feeding tests, even the cattle seem to think it's a good idea."

Unusual though it may be, this method of getting rid of waterweeds is one of the more promising solutions to a problem that now involves almost every state, federal, and local agency in Florida.

By finding just one high volume use, such as cattle feed, for the hard-to-control vegetation, the cost of mechanical harvesting would become economically practical, explains Dr. James Hentges with the university's Institute of Food and Agricultural Sciences.

Only the most troublesome waterweeds—the hyacinth and the hydrilla, or "Florida elodea"—have been fed to cattle so far. Other pesky but nutritious aquatic weeds may eventually end up in animal feed, also. Another phase of the study will determine if the weeds can be fed to poul-

try and hogs, he said.

Hungry cattle had been known to eat aquatic weeds right out of the water when land forages are not available. But tests indicate they'll gobble up the vegetation faster if it's processed and mixed with other dietary ingredients such as molasses and cereal grains.

Of the two aquatic forages offered to the cattle, those containing ground up, dehydrated hydrilla were much more popular. They ate less processed water hyacinths because the fibrous material in these plants is bulky. It moved through their digestive systems more slowly, thereby limiting their intake capacity or appetite.

Acceptance of both aquatic forages was measured in terms of the amount consumed and weight gained. A nutritionally balanced feed composed of 75% hydrilla was consumed at rates comparable to feeds containing the same ratio of land forage. On the other hand, feeds containing more than 25% water hyacinths were not consumed fast enough to produce

the desired weight gains.

Some waterweeds were more nutritious than others, and this was attributed to the low fertility or nutrient content of the Orlando and Lakeland fresh water sites from which the weeds were harvested. The project's animal nutritionist, Dr. Ray Shirley, believes higher weight gains can be achieved as the quality and processing of aquatic forages is improved.

Before cattle can actually begin nibbling away on the waterweed problem, some economical way of dewatering the aquatic vegetation must be found. For every ton of dry matter, some 20 tons of hyacinths must be processed. Deciding which process will do the job economically without removing vital nutrients at the same time is being studied by Dr. Larry Bagnall, assistant agricultural engineer for IFAS.

Ultimate success of the animal feeding project will also depend on the development of an inexpensive way to harvest both the floating and submerged waterweeds, he said.

Ansul Introduces Phyban HC For Railroad, Industrial Weeds

A new high concentrate weed control agent for the control of vegetation along railroad rights-of-way and industrial sites is being introduced by The Ansul Company, Marinette, Wis.

Phyban H. C., designed for general post-emergent weed control, is a combination of MSMA (monoso-

dium acid methanearsonate) and a surfactant. It is effective on both broadleaf weeds and grasses.

In addition to controlling weeds along rights-of-way, Phyban H. C. is recommended for use along highways, utility and pipe lines, sidewalks, driveways and parkways, storage areas, and around power plants and buildings. The product has been tested and found effective in controlling such weeds as puncture vine, wild mustard, wild oats,

chickweed, sandbur, ragweed, pigweed, barnyardgrass, giant foxtail and yellow foxtail. It also effects top-kill on perennials such as Johnsongrass, Dallisgrass and nutsedge.

The product is designed for application through regular spraying-equipment. For more details, circle (721) on the reply card.

Liquid Fertilizers Booklet

Know all you want to about water soluble fertilizers? If not, Boyle-Midway, manufacturer of Heller-gro offers a free booklet that takes up many of the questions asked by growers, arborists and nurserymen. The booklet covers mixing, dilution, compatibility with insecticides and fungicides, turf-feeding, tree propagation and nourishment, foliar techniques, and use in the greenhouse. For more information, circle (722) on the reply card.

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