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WTT-2



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Three Wheeler offers up-front visibility, away from heat and fumes. A traditional Front Runner convenience.

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Choose the GMT, Turf Truck or Three Wheeler. All offer proven performance and all-season versatility.

Heavy-duty grounds maintenance wasn't an afterthought with the Front Runner. It was the plan, from the drawing board to the final product. That's why the Hesston grounds crew features the lean, efficient look... along with the lean, efficient capacity to do the job.

Note the control, maneuverability and stability. The key is front-wheel hydrostatic drive. Infinitely variable speeds plus instant forward-reverse are yours through a single lever in the up-front cockpit. There's also precise hydraulic control of up-front attachments. And with the high flotation turf tires there's unmatched sure-footedness. Available in either 19.8 or 23 hp.

Note the versatility. Up front, there's a choice of Mowers — 48", 60" or the 80" batwing mulcher. The self-contained Vacuum Pickup gathers clippings, leaves and litter as you mow. And there's a choice in snow removers — the Snow Blower, Snow Thrower, V-Plow or Angle Blade (also great for moving dirt). Rear attachments include the Dry Spreader and Liquid Sprayer. A steel cab is optional.

Front Runner GMT. The original revolution in grounds maintenance. It's more than a mini-tractor or an adapted riding mower. The GMT is the first of a new breed. Articulated steering is the big reason. The center pivot lets you make short turns, mow flush around trees and shrubs and trim tight along buildings. And the GMT keeps working all year to vacuum, clear snow and move dirt.

Front Runner Turf Truck. Take it away! Up to 1000 lbs.! Presenting the first true grounds maintenance truck with the rugged versatility to do more. The Turf Truck takes on the same year 'round jobs as the GMT with many of the same attachments. Options include a hydraulic dump bed that's controlled from the operator's seat.

Front Runner Three Wheeler. The new look in value. Clean design, stability and operator comfort — now in a three-wheeled machine. Front-wheel hydrostatic drive plus a heavy-duty automotive gear box with rack and pinion steering equals excellent stability and maneuverability. The Three Wheeler offers the versatility to handle year 'round chores. It's an all-season value.

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19 Battle of the Budworm — Vintage World War II bombers lead the attack on spruce budworm in Maine's northern forests. Forty-six pilots flying insecticide in the 1975 operation came from as far away as Oregon, Arizona and Georgia.

23 Sources of Nitrogen for Turf — Here's a round-up story on the history of nitrogen requirements. The article answers questions on the various sources of nitrogen for use on the different turf varieties.

26 Successful Sod Installation — Any successful sod installation begins with proper site preparation, says turf specialist John Hall. And just as important is the selection of quality sod containing varieties that perform well in the climate of the area.

44 Myth, Magic and Misconceptions — A group of arborists traveled to the "home" of Dr. Al Shigo, the Hubbard Brook Experimental Forest Station, to get a first hand look on some of his tree wound and decay work. Shigo's work has "exploded" many of the myths that have been perpetrated through the years.

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THE COVER — The 18th green on Bill Lyon's back nine offers a view of this entire rye grass course.

Editorial

Five years and more than a few billion dollars have brought the Environmental Protection Agency to 1976. Long ago the Agency scooped up people, funds and regulatory powers involving pesticides from the U.S. Department of Agriculture. And EPA, with what seemed like a mandate from America to clean up the environment stepped bravely into industries such as ours . . . bringing tons of its taxpayer money, reams of forms and red tape, legions of bright young lawyers and an unbelievable sea of misunderstanding.

Much of this was necessary, we said, if we are to have both a protected environment and a proper freedom for use of pesticide tools in our industry. Our industry leaders stopped fighting and started joining regulatory officials . . . working to cut down on misunderstanding.

It worked. It is working. But we still can't help but lament how troublesome, expensive, time consuming and downright irritating it is to have the problem being solved by the federal government.

Now, there's a federal law so tough that one man, the EPA administrator, can suspend uses of a pesticide with or without sufficient proof. He needs, as nearly as we can tell, only something called cause.

A few weeks ago this actually happened. The man is Russell Train. The pesticide is chlordane. And the proof wasn't there, according to EPA's own law review procedure.

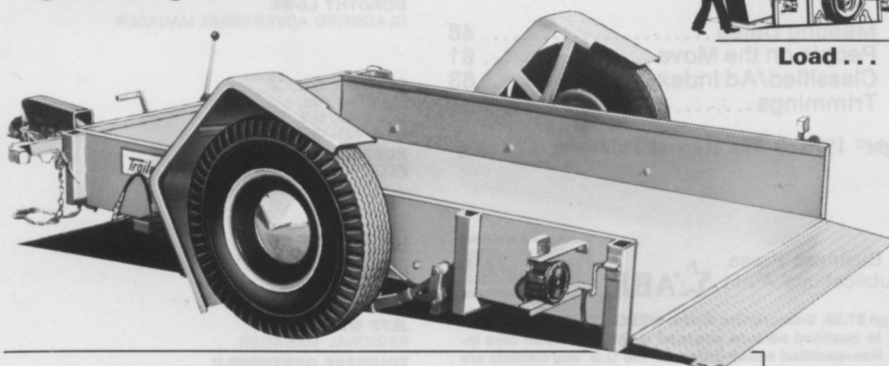
Yes, we have learned some hard lessons in this pesticide business. And we may have more instruction yet to come. But, if we forget all else, we should still remember just how EPA was created and how it began to use its power. This lesson will be important to keep in mind in many other aspects of our business.

Very briefly, Congress created the EPA when large numbers of people were saying . . . "the situation is so bad that the government ought to do something about it." Large numbers of people put the power in Washington, but with no instructions on how it was to be used.

The power was to be used, we have discovered, where the most influential and strongest pointers directed. DDM

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the hydraulic elevating trailer that moves
your equipment easily from
job to job.



TILTSTER The low bed trailer that tilts.

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The turf taxi.



76-CUT-8

Government News Business

EPA boss, Russell Train, placed an immediate ban on approximately 85 percent of the uses of heptachlor and 70 percent of chlordane. He said continued production and use of these pesticides would create an "imminent hazard" of cancer in man, and that this risk outweighs the benefits of continued use. After the EPA ruling, the Environmental Defense Fund filed a petition in the U. S. Court of Appeals asking for a review of the EPA decision and arguing that the ban should be extended to all uses.

However, the law judge had said there wasn't sufficient evidence to suspend use of the chemical as an imminent cancer hazard and called the scientific evidence inconclusive. Train replied that despite the administrative law judge's comments, it isn't necessary to find "conclusively" that harm to humans will occur if the pesticides' uses are allowed. He said he found continued use of the pesticides would "likely" result in an "unreasonable risk to man."

Approximately 21 million pounds of chlordane and two million pounds of heptachlor were produced by Velsicol Chemical Company in 1974. He said residues of the pesticides have been found in human tissue, human milk and human fetuses; in air, soil and water, and in meat, fish and poultry.

Hearings will continue to determine if Train's ban should stand.

In further EPA action, Train appointed 15 public and 5 "exofficio" members to the Agency's newly created Pesticide Policy Advisory Committee. Train said its purpose was to broaden the in-put he receives from a variety of viewpoints on important pesticide actions.

Dun's Review magazine named Outboard Marine Corporation one of the 1975's 200 best-managed of 1,400 publicly held companies. The selection was based on short-term earnings performance, average rate of return on common equity over the last five years, professionalism of management, corporate planning, financial acumen and marketing strength.

Albright & Company recently announced their formation as a California-based distributor for turfgrass and flower seeds, Duraloam soil conditioner, and erosion control products.

Penn-Gro Corp. received exclusive franchise to distribute P. J. Engineering's automatic precision grinding machines for grass-cutting equipment.

The Fertilizer Institute energy survey results indicate that ammonia and phosphate producers have succeeded in trimming their needs of natural gas in all production activities. Ammonia producers have decreased their use of gas from 40,706 cubic feet per ton of ammonia produced in 1972 to 39,379 cubic feet in 1975; a drop of three percent.



Now here's a mower.

This 9-gang giant will take on the biggest mowing job you have and breeze right through it.

Grady Hassell can tell you about it. He's with Lawn & Turf, Inc. in Conyers, Georgia.

As a Jacobsen Distributor he has all the answers about Jacobsen equipment. Like the huge F20 9-gang mower.

He'll tell you that it cuts a wide 19-foot swath. It has a gargantuan appetite that can cut through 76 acres in one work day. And that's mowing at a realistic pace.

But it's easily tamed for more delicate chores because the operator can raise and lower any of the reels with a fingertip control. Things like median strips can be mowed from the road shoulder with the outboard reels, for example.

Just because it's big doesn't mean it's clumsy. Far from it.

There's a ground-gripping front drive that gives sure traction on grades and sidehills.

And the rear wheel steering means that the reels turn in the same arc as the steering wheels. No skidding, no skipping, no uneven cutting in the turns. And no wheel streaks in the straightaways, either.

If you have big mowing chores ahead of you, ask your Jacobsen Distributor about how the mighty F20 can help you. An actual demonstration ought to raise your eyebrows a couple of notches.

And you might even find yourself saying, "Now here's a mower."

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- Is remarkably resistant to leaching and lateral movement !

Acceptability!

For the past several years, SPIKE has been tested in actual field situations with commercial equipment. When applied in accordance with label directions, SPIKE will result in a high level of long lasting total vegetation control.

Test plot demonstrates dramatic result of single application of SPIKE. ▶



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Missouri test plot treated with SPIKE shows residual control 2 years later! ▶

