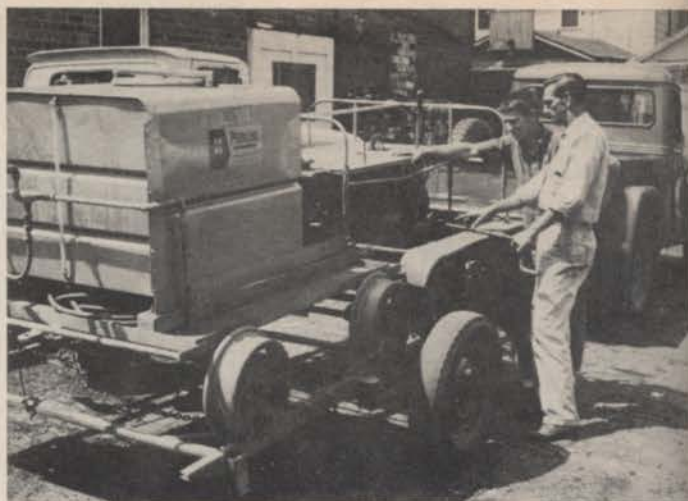
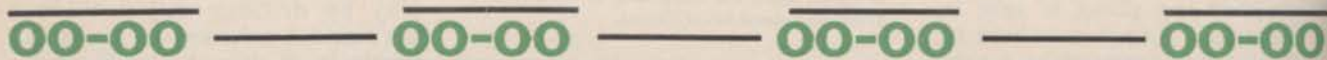


Azo
CHEMICAL

Versatile
Contract
Applicator



Easily towed, the small motorized handcar with sprayer-trailer has increased Azo's business capability. Here, Earl Baer, 7-yr. Azo veteran (right), shows Dave Norman how a Studebaker transmission helps treat railroad yards.



TO THE UNINITIATED, Azo's railroad "track treat-er" at work seems like a fantastic game of tag between a huge locomotive switcher and the tiny motorized handcar with its sprayer-trailer attached.

First the switch engine moves down the track pushing several idle boxcars out of the way. Then the little handcar comes putting along behind, its pump and boom spraying weeds in the ballast. When the handcar eases to a stop behind the switcher, the game reverses. The handcar runs and

the leviathan locomotive slowly pursues it back to the starting point.

When the pair comes to a switch, a controller in the tower throws a lever and the incongruous duo repeats its game on a new set of tracks.

To Lawrence A. Smith, president of The Azo Chemical Co. of Canton, Ohio, treating 15 miles of railroad yard track is industrial weed control "business as usual."

The day's work done, the handcar puts to a crossover

grade, and is winched onto a balanced two-wheel trailer and handily hauled back to the Canton offices.

The motor car was a wise purchase Smith made several years ago, when customer demand for weed control in railroad yards warranted the investment. Although the car was useful for treating yard track, Smith found that the drive mechanism—four speeds forward and a friction wheel drive reverse — was not suited to the requirement for both forward and reverse speeds. After burning out several friction wheels in reverse, Smith removed the factory-installed transmission and put in his own Studebaker transmission — less second and high gears. He used only low and reverse so his own men would be relieved of the temptation to hot rod on the railroad tracks. With a reverse gear instead of a friction wheel, his need for reverse speed equal to forward speed was filled.

The Azo Chemical Co. is an 18-year-old business which began in Canton in 1946 as a pest control firm. Four years later, in 1950, pest control customers began demanding weed control service. Smith read up on the subject and



Fence-line brush control is part of Azo's industrial service. Here, Jim Whitmer, a "key carry-over" man, applies systemic brushkiller and Telvar (monuron) soil sterilant for quick topkill and lasting residual control.

discovered he was already equipped with machines to do successful weed control work.

For the past five years Azo has been headquartered in a large, "vintage" warehouse at 715 9th Street NE in Canton. In spite of an out-of-the-way location in the 32,000-sq.-ft. building, Azo has grown from \$30,000 a year gross in both pest control and weed control 10 years ago, to a present \$125,000 total yearly volume in both fields.

Smith credits approximately \$50,000 worth of business to pest control. Of the remaining \$75,000, 90% comes from statewide industrial vegetation contracts, and the rest from local residential lawn jobs.

Growth Began With Weed Control

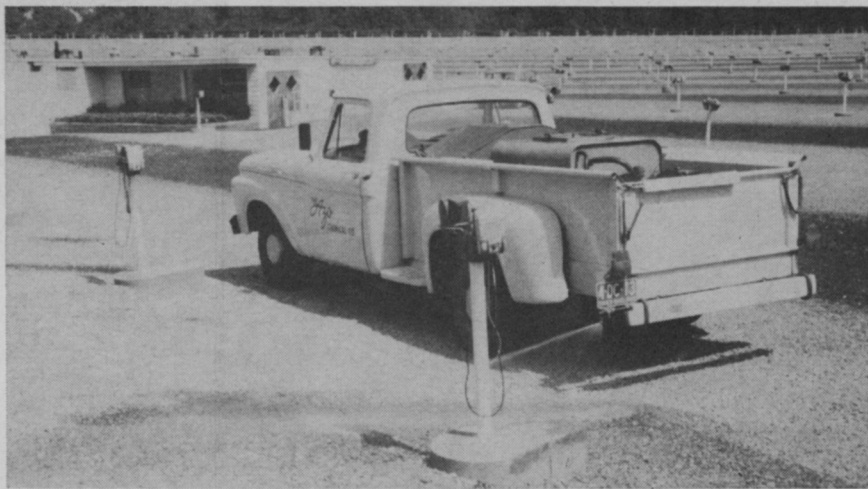
"We started to grow when we began to offer weed control," Smith says. "For the first couple of years we were hesitant about what to use, so we experimented a lot to find out what was best for us. There was no good standard source of regular information at that time."

Smith has high regard for Telvar, DuPont's monuron soil sterilant, and brushkiller (2,4-D and 2,4,5-T mixtures). Lately, he's found increased success with the new Hyvar X water-soluble bromacil sterilant. Usually only one soil-sterilant treatment is necessary, but an Azo agreement provides for at least two inspections during the summer to make certain there is no regrowth or no missed spots.

"Over the years our truck fleet has grown to 12 vehicles, three of these for pest control in the summer and nine for weed control. In winter, two trucks are turned over to pest control," Smith explains.

"When our weed control trucks are out of service in the winter, we put them into mothballs, so to speak," he adds. "They get a good cleaning, and a fresh paint job; then we cover the mothballed trucks with 6-mil polyethylene tarps which are sealed with tape. This keeps them fresh and clean for spring. We also cancel insurance on trucks not used in winter."

Azo paints the trucks various



Off-center nozzle mounted in this truck's rear bumper treats speaker posts at drive-in theaters. The driver of this 3/4-ton Ford controls spray from inside cab. Telvar is the herbicide used here.

pastel shades of blue, pink, and green to demonstrate dramatically the size of his fleet.

"We're presently using 3/4-ton Ford and Chevrolet pickups for normal weed control operations. We also have two Jeeps to use where trucks might have trouble or around homes where a small vehicle is an advantage," Smith points out.

Chain Hoist Good Investment

When Azo moved into the present headquarters, the company had 13 trucks, each equipped with an application rig. This was a carryover burden for the winter slack period. "It was then that we saw the possibility of using a chain hoist in this building. We mounted an I beam through the garage to the door. I bought a heavy chain hoist in a junk yard for five cents a pound and mounted it in the shop," Smith recalls.

"With this hoist we were able to eliminate one truck and double our number of sprayer units to 26," he goes on. "Now one truck can do any of seven weed control or pest control jobs with only five minutes changeover time."

An Azo truck can carry a 100-gallon spray rig for an industrial soil-sterilant job, or, with a simple change of units, the truck can perform residential lawn weed work with a 25-gal. sprayer. With a simple turn of four nuts, the rigs are bolted firmly onto a truck bed.

Smith keeps his tank and

pump rigs mounted on skids, which can be set onto dollies and wheeled to any place in the shop for repair or storage.

"When we overwinter spray rigs, we store them in a pigeon-hole affair constructed of 2x4 lumber. We can stack the spray rigs three high. This innovation was necessary because we didn't have room to store both our trucks and sprayers on the floor, so we had to put them up in tiers. It's a great help to us," Smith affirms.

Azo has 15 employees; 13 of

(Continued on page 22)

Edging with chemicals keeps grass from growing between posts of parking lot barrier. Ken Barnhart applies soil sterilant with low-pressure gun. Note plasticized chemical-resistant gloves, worn to protect the hands.



Azo Chemical— Versatile Contract Applicator

(Continued from page 17)

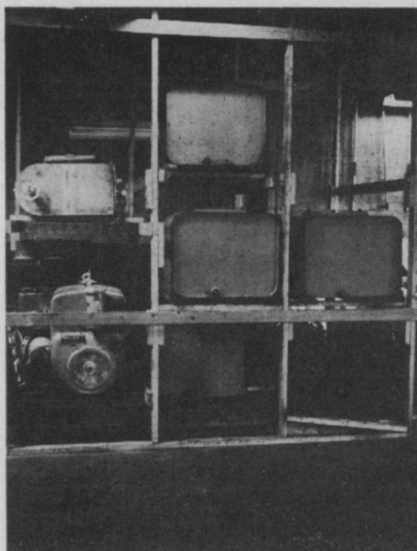
them are servicemen involved in weed control. Six of the 13 are seasonal help in weed control. Smith says he tries to get the same six men each season. He feels it's possible when men are chosen carefully. Smith presently has a good arrangement with a retired 45-year-old policeman, who goes to Florida in the winter and works for Azo in the summer. There are four regular pest control servicemen, who double in weed control when needed, and three of what Smith calls "key carryover men," the nucleus of his service force. One of these has been with Azo for seven years.

Smith's attorney, Ed Zink, also serves as corporate secretary. Azo also employs a regular secretary who doubles as book-keeper.

Weed control men cover the entire state of Ohio and have routes like those of traveling salesmen. They often leave Monday and do not return until the following Saturday. Such trips involve one man per truck.

How Azo Sells Services

Azo uses direct mail advertising extensively. A personal letter directed to a maintenance



Pigeonholes for spray rig storage is an Azo innovation. Rigs are lifted onto upper tiers with a chain hoist. Dollies can park beneath. Shelf gives Azo more off-season floor space.

supervisor, along with a business reply card, invites him to ask for an inspection and an estimate.

"This direct mail method has been fairly successful," says Smith, "because weeds are eye-catchers. Since everybody with real estate has them, no one can say they don't have to control weeds."

When asked whether Azo uses salesmen, Smith replied, "We have experimented with salesmen. One winter, a key carry-over man called on various businesses 'cold,' and landed a re-

spectable number of contracts. This was fairly successful, but we feel that direct mail, for us, is more productive, per dollar spent.

"We push direct mail campaigns in the fall when weeds are highest, so maintenance managers can see, when they read our sales piece, exactly what we're talking about. Also, we have a push in the spring, when the feeling of plant pride is high, you know, that 'clean up, paint up, fix up' feeling," the CA explained.

Radio Ads Swamp Business

"Besides direct mail, what other kind of selling have you done?" we asked.

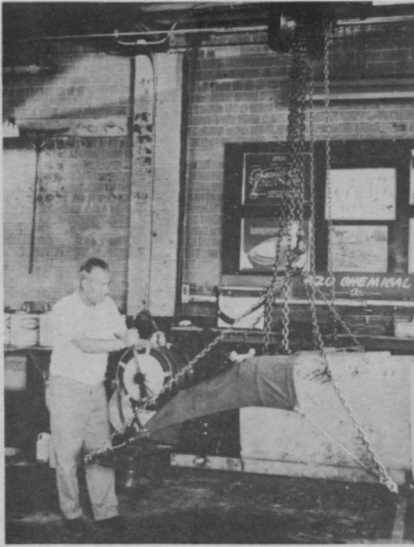
"We experimented with radio ads a few years ago to drum up business for local residential lawn weed control. We broadcasted one-minute spot announcements, consisting of a singing jingle. The punch line ended with 'She knows where the yellow went; she called Azo.' Of course, the 'yellow' is a yard full of dandelions which everybody tries to get rid of. Anyway, we were so swamped with calls for service we couldn't possibly handle, we had to stop running the ads," Smith replies with only a slight tone of lament.

"At present we are not cultivating residential accounts, because we're so busy with industrial business. We're not prepared to expand temporarily for the seasonal spurt of lawn weeds; it would be better to offer complete lawn service which we don't want to do now," he adds.

For the limited residential weed work Azo does, the men use a Hardie Town & Country spray rig mounted on a Jeep. It has a 25-gallon capacity and pumps out spray at a low pressure (250 psi). They can apply either 2,4-D water-soluble amine—the nonvolatile type—(4 lbs. per gallon), or chlordane for crabgrass and turf insect control. On a chlordane job, a separate Town & Country sprayer is used because of the danger of 2,4-D carryover in the spray. If customers wish, Smith will fer-



Azo owner, Larry Smith, shows a residential trident spray wand. He explains that some men never learn how to spray a lawn. Jeep-mounted rig is a Hardie Town & Country, 25-gal. sprayer.



Skid-mounted spray unit glides easily along the I beam cradled in the hoist chains. Smith shows how he can move a sprayer from storage to active duty. Setup multiplies jobs trucks are put to, saving equipment money.

tilize with a 10-12-10 water-soluble fertilizer in the chlordane emulsion.

Who Are Smith's Servicemen?

"We do not actively recruit weed control servicemen," Smith remarks. "Usually there are enough calling us so we can pick and choose. Since there are very few men with any experience in weed control, we find we get along well by training our own. We attend winter short courses and hold regular meetings in the shop where we hash over problems which have come up through the summer. We get these straightened out by springtime.

"I have never hired a man who has more than a high school education, although high school is not an imperative requirement for a job here. I think the man's personality and desire to learn and work is very important. Experience has shown me that his personal appearance is probably one of the best indicators of a man's worth," Smith reveals. "This is what I have been paying attention to recently. His appearance will tell me whether I want to talk further with him."

Azo's men are paid on an hourly rate. Smith feels that this gives men more incentive to go ahead and finish a job if he has to, rather than knock off at "quitting time" and go back to

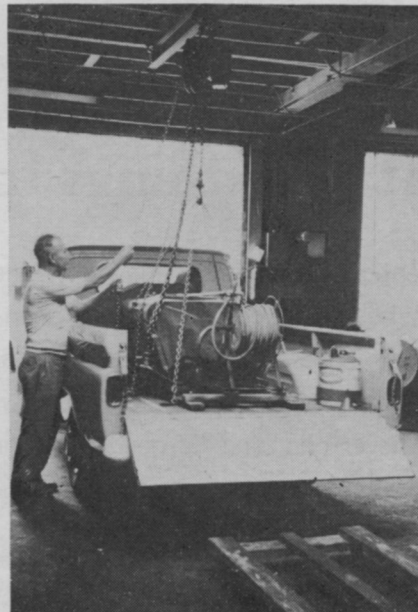
finish later. "We avoid 'gold-bricking' by setting quotas which the men should be able to meet," he says.

A rule which Smith insists all his men follow is: "Obey the rules of the company in which you're working." Since many contracts involve steel plants, which have elaborate safety precautions, Smith provides the necessary brightly colored safety vests, hard hats, and goggles his men need to comply with all regulations of plants in which they work. Vehicle speed rules inside plants must be obeyed also. "After all," Smith says, "we are indirect employees there."

The Azo men wear company-issued clothing which they maintain themselves. The shirts have the company name over one pocket and the man's name over the other. Also supplied are chemical-resistant, plastic-coated gloves for the men when they work with herbicides.

Some Equipment Adaptations

For weed control in outdoor drive-in theaters, Smith has adapted an off-center nozzle so it can spray around speaker posts. The nozzle outlet fits into the left-hand side of the rear truck bumper. The nozzle is detached when the truck is in traf-



Five minutes is enough time to switch sprayers. Dolly (lower right) carries rig to or from the truck. Four bolts secure the skid to the truck. One man can perform this time-saving operation, cutting down on man-hours.

fic. Feeder hose for the off-center nozzle runs from the pump into the cab where it goes through a valve, then back to the rear bumper. The driver can control his spray from inside the cab.

Spray can be diverted from the cab valve by turning a gate valve near the pump which will then deliver spray to a hose and on to a hand or orchard spray gun.

Smith chooses a Hardie Model 99 sprayer for off-center spray work. It has 100-gal. capacity tank. The piston pump is powered by a 4-hp Briggs and Stratton gasoline engine. The pump develops up to 400 psi. Telvar is the soil sterilant of choice for jobs such as the drive-in theater.

The railroad power handcar, mentioned at the beginning, is another Smith innovation. His custom, steel-wheeled railroad trailer carries a Hudson Peerless 100-gallon power sprayer which tags along behind the power handcar on which two men ride. The sprayer has attachments for either boom or gun application of soil sterilant to railroad ballast.

For highway transit, both the power car and railroad trailer are towed behind a pickup truck on a balanced two-wheel trailer. When the two-wheel trailer is pushed onto a grade crossing, it can be tilted so the railroad-treating rig can be winched up the ramp. The railroad wheels are chained to the highway trailer to keep the treating unit in place. Two men can easily level the loaded trailer because it is balanced, and maneuver it to the trailer hitch on the pickup truck.

Calibrate Sprayers, Not Men

"There are some men who can never spray lawns, because their treating speed is too erratic, or they can't maintain a steady pace through all their jobs," Smith claims. So he has painted a 1,000-sq.-ft. area on the bricks in the parking lot in front of the office where he tests a man's lawn treating ability.

"Instead of trying to make the men conform to a working speed of a machine, we calibrate the

machines to the men. When we find a man's steady speed, where he will not tire or slow down at the end of the day, we set the dilution rate for the chemical, then measure how much liquid he takes from the tank. This way we can fairly accurately measure and apply at the same time," the Canton CA details.

Smith says his calibration is $\frac{3}{4}$ inch of liquid for 1,000 sq. ft. That is, he will lower the liquid level of a Town & Country sprayer $\frac{3}{4}$ inch when he treats 1,000 sq. ft. "So I have to make my dilution accordingly to apply the proper percentage of 2,4-D in that $\frac{3}{4}$ inch of chemical dispensed. Each man has his own sprayer that he always uses; we don't switch men or sprayers. If we get a man who can't maintain a steady pace at any level, we find another job for him to do; if he's good at that, okay; if not, he goes," Smith admits.

Smith finds a Rolatape, Model 400, foot measurer an indispensable aid for measuring both square and linear footage on jobs. Footage is as important on residential work as it is for treating railroad track. This is how Smith makes estimates.

A length of fire hose is a handy aid to have along on industrial weed jobs, he found. Smith points out that most industrial plants have their own private fire-hydrant systems. Azo gets permission to fill up from these. The fire hose will load a 100-gal. tank quickly and save time on the job.

"Each man on an industrial job, when he has to refill his tank, will have a premeasured amount of weedkiller in a labelled plastic jug. This will be just enough to make the right concentration in 100 gallons of water. The jugs save space and are easier to handle than large drums of concentrate. There is also less danger of spillage and waste," Smith tells us.

"Where can this industry go; what do you see as the future of weed control?" we asked.

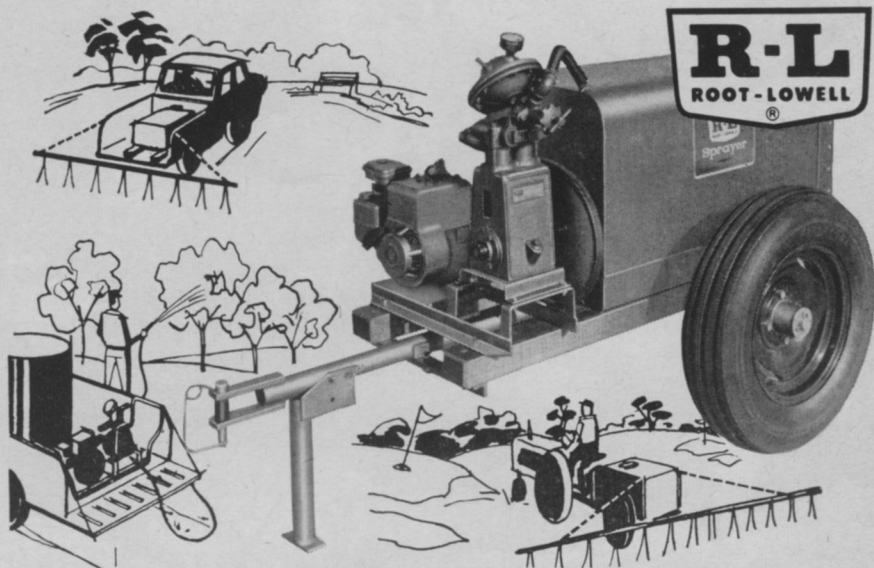
"You see those small businesses," he pointed to several concrete block buildings along the highway, "their lots are pretty weedy, and there's no one

around to service them. Yes, I've got myself into some large businesses like steel mills and the like. My operations aren't geared for small accounts. An aggressive seller and a good workman could offer weed control to these small businesses and make a good living. The jobs are there for the asking; your 'salesmen,' the weeds, are as plain as the nose on your face, and they're standing right outside your customers' doors."

Greenfield Prints Brochure

A new brochure which describes technical assistance and gives detailed information on products for turf production and maintenance, has been recently made available by Greenfield Research Center.

For a copy of Greenfield's Commercial Landscaping Plan, write to Elanco Products Co., Box 1750, Dept. WT, Indianapolis 6, Ind.



IN POWER SPRAYERS THE BIG PERFORMER IS

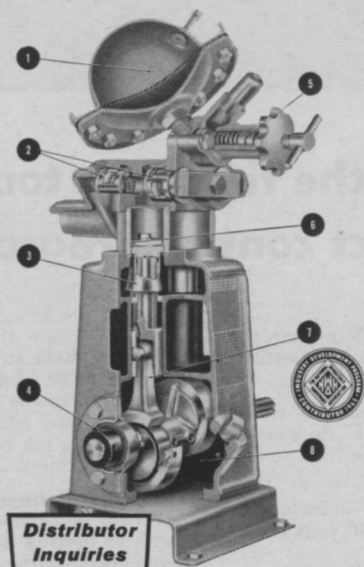
Root-Lowell DURAPOWER*

with all new 5 or 10 GPM DURACYL* PUMP

Get better results from all sprayable materials with Durapower. Tops for any gun or boom application. Fourteen models wheel or skid mounted, 50 through 300 gallons. Choice of 5 or 10 GPM pump with constant discharge at pressures to 400 lbs. P.S.I. WRITE FOR FREE BROCHURE "FACTS AND FIGURES" including calibration, conversion and field application data.

DURACYL PUMP FEATURES:

- | | |
|------------------------------------|--------------------------------------|
| 1. New pre-pressurized accumulator | 6. Diamond-hard ceramic cylinders |
| 2. Finest valve assemblies | 7. Heavy-duty bearings & rods |
| 3. Leak-proof piston shield | 8. Continuous oil-splash lubrication |
| 4. Extra heavy ball bearings | |
| 5. Precision pressure regulator | |



Distributor
Inquiries
Invited

Mail Today →

* Trademark

ROOT-LOWELL CORPORATION
Division of Root-Lowell Mfg. Co.
Lowell, Michigan 49331

ROOT-LOWELL CORPORATION,

Lowell, Michigan 49331, Dept. WT

Please send me free brochure "Facts and Figures"

Name _____

Address _____

City _____ State _____

Zip Code _____