

One year after application, this sweet gum is perfectly healthy on one side, dead on the other side. In another year or two, the limbs will drop off. Air visibility of the pipeline right-of-way is achieved as soon as leaves drop off in one to two months.

TURBO  **TRIM**

RIGHT-OF-WAY
With Chemicals

DEEP IN SOUTHEAST TEXAS, near Kilgore, Tom Mobley and I headed for tall timber.

We had a hard time finding what we were looking for. It weighed 22,000 pounds, stood 10 feet high, stretched 30 feet long, was bright red and yellow, roared like an earth-moving tractor, and spit a mayonaise-like fluid 100 feet into the air.

Except for occasional pauses to analyze the quality of ripened blackberries, we searched diligently. The "putt-putt" of hundreds of oil well pump engines dominated sounds. Trees that had grown from saplings to 60 to 70 feet high after this world-famous oil field was developed three to four decades ago dominated our sight. The height and canopy of the trees, in fact, is the reason we have this particular Texas story to tell.

Though it is the colorful and dramatic symbol, the TurboTrim vehicle is not the subject of this report. The story is about a technique of maintaining rights-of-way by chemical side-trimming.

It's a technique that has developed in three years to a fifth and full-fledged division of the Mobley Company, Inc., Kilgore.

Tom Mobley is one of three brothers who own this Texas "mini-conglomerate." Tom is president of Mobley Company, Inc., and vice-president of the Chemogenics Division. John Mobley III is chairman of the board of Mobley Company, Inc., and president of the Chemogenics Division. David Mobley is president of the Applied Chemicals Division.

Factors that have proved the worth and produced the success of the TurboTrim, said Tom Mobley, are:

1. Height of application.
2. Accuracy of chemical placement.
3. Maximum effectiveness from amount of chemical used.
4. Speed of application and of job completion.

5. Lower cost.

As have many businesses, the Chemogenics Division evolved from the solution of a problem.

Oil pipelines lace the countryside of east and southeast Texas as do streets and freeways in a metropolitan area. But for several decades, oil companies faced no difficulty in policing rights-of-way Mother Nature, appearing almost revengeful at having been drilled into and slashed through during the peak of oil drilling and pipeline

construction, counterattacked, pushing trees higher than the derricks and spreading limbs, brush and weeds over the pipeline trails. Most pipelines have had a moving program to keep the right-of-way clean a ground level. Pipeline walkers patrolled the lines to search for leaks.

Aerial reconnaissance of pipelines became more economical than maintaining linewalkers. The problem was seeing the right-of-way from the air.

"By the early 60s, Tom Mobley be-

Mobley Company's TurboTrim easily hits this tall pine, perhaps between 70 and 80 feet high. It's a two-man operation, R. C. Cloyd is the tractor driver and Ernie Ray is operating the TurboTrim. The modified John Bean blower sends the invert emulsion skyward at a velocity of 100 mph.



MAINTENANCE

By GENE INGALSBE



This three- to four-foot section of an oak tree shows how fine a line can be drawn with TurboTrim. Maximum coverage on the left dwindles to no coverage on the right. Trimming by hand often resulted in insect infestations and vigorous resprouting. The limbs at left are shown one year after treatment. Sprouts after hand trimming are dead, and no new sprouting has occurred.



The invert emulsion comes out a creamy consistency providing drift control, rain resistance, more surface absorption, less evaporation loss, and placement accuracy.

"One of our pipeline customers agreed to provide a test site," Mobley continued. "We used Ammate plus a proprietary mix and a modification of the Stull bifluid system. Our wind machine was a modified John Bean, although it could be a Myers or somebody else's.

"A seven-mile stretch in deep east Texas was treated in August of 1967. Everything looked fine in the spring of 1968. We treated another 50 miles, still on an experimental basis.

"Upon review, we knew we were on the right track and that the system would do the job."

All Terrain Vehicle

The Mobley Company didn't walk or run into this new venture, rather, it plowed into it. This boldness in taking on the roughest terrain and vegetation conditions produced the TurboTrim applicator.

"The 50 miles we tackled were along the Gulf Coast and during an especially wet summer," recalled Mobley. We were using a four-wheel drive truck, and were constantly getting stuck. Along the way we saw loggers operating with big equipment, and on occasion hired their rig as a tow."

Impressed with the invincibility

gan, "overhanging trees were becoming a problem. Cutting was expensive and regrowth was inevitable. Cutting also brought on insect infestations. I've seen stretches of forest paralleling rights-of-ways killed by the pine beetle that entered the trees through the limb cuts and tree-climber's cleat wounds."

and material could treat the high limbs."

Stull's herbicide emulsion is one in which oil surrounds water droplets, as opposed to the more common emulsion of oil droplets in water. A "multiphase invert" is a Stull emulsion in which oil surrounds water surrounding oil.

New Technique Required

Mobley Company, through one of its older divisions, Applied Chemicals Division (formerly Walker Chem-Spray), had been providing weed control service, treating large industrial sites, tank farms and railroad yards for several years. The peculiar nature of the pipeline vegetation problem called for something different.

"The key problems were height of application and drift control," said Mobley. "In 1967, we tried out a John Bean RotoCast and Stull Chemical's bifluid invert emulsion system. We envisioned that with some modifications, this equipment



Tom Mobley, right, visits with Ernie Ray while the TurboTrim is being restocked. The men on the vehicle are Tim Davis and Dennis Sadler. At this particular stop, water was taken from a pond near the right-of-way.

of the logging vehicle, the Mobleys purchased a four-wheel drive, rubber-tire, articulating, all-terrain vehicle, made by Franklin Equipment, Inc., Franklin, Va.

Mobley engineers mounted a modified John Bean sprayer, a 1,000-gal. tank, a dozer blade in front, and a winch.

"It's great to drive," said R. C. Cloyd. "It can be mired, but not very often."

In 1969, the TurboTrim treated rights-of-way for two rural electric cooperatives, five pipelines and two investor-owned utilities.

"We worked the hardest areas last year," Mobley said, "but a Texas guess is that we'll cover 500 miles this year.

How TurboTrim Works

The TurboTrim program is this:

1. Chemical is applied only to limbs overhanging the right-of-way obscuring the vision of aerial patrolmen or interfering with conductors. The air blast carries the emulsion to every target portion of the tree.

2. Ten days to two weeks after application, the deadening process has begun. The chemical has penetrated each leaf, limb, and twig, and leaves have turned brown. Additional limb and twig growth has been stopped. Most leaves will fall within one or two months.

3. One year after treatment, the deadening process is complete. Each limb and twig treated is dead. The decay process has begun. The smaller twigs at the end of each limb are the first to fall to the ground in small pieces resembling the natural self-pruning of all trees. No additional growth will occur to the treated limbs.

4. Three to four years after treatment, all limbs have self-pruned and have been unnoticeably assimilated into the natural dead fall. No re-sprouting has occurred. The pruning process is complete.

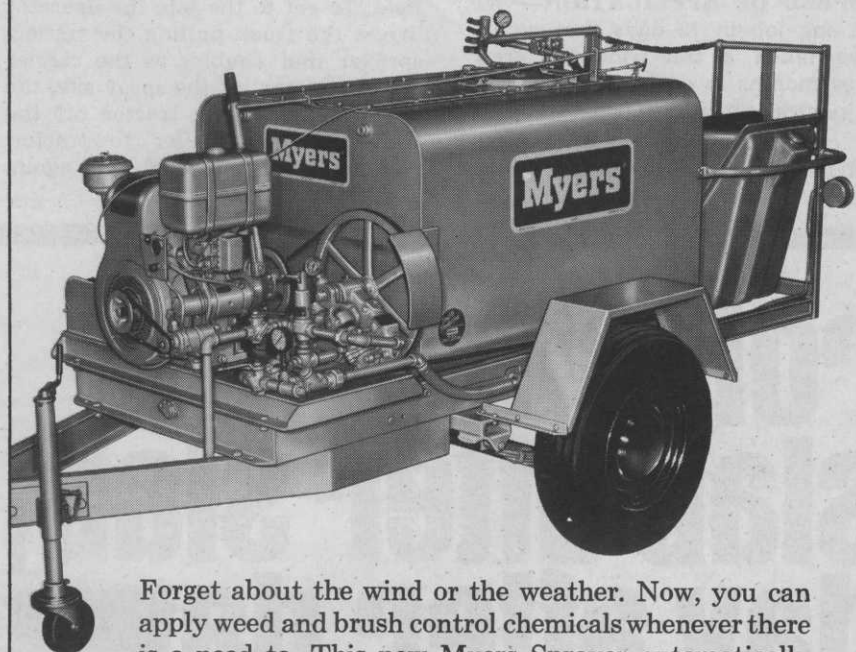
Back to the advantages of the TurboTrim:

HEIGHT—The more common, or conventional, spray equipment reaches 40-50 feet effectively, but much more chemical is necessary for greater heights, Mobley said. "The TurboTrim is effective up to 100 feet, partially due to the invert emulsion, to the equipment we use, and to the ability of the operator," he added.

The day we saw the TurboTrim perform, two trainees, Dennis Sadler and Tim Davis, were working along with Ernie Ray and R. C. Cloyd. By mid-June a second TurboTrim went into operation. One contract is

Keep Herbicide Sprays in the Target Area

...with Myers new Du-All Invert Sprayer!



Forget about the wind or the weather. Now, you can apply weed and brush control chemicals whenever there is a need to. This new Myers Sprayer automatically mixes, meters and applies Visko-Rhap* herbicides in mayonnaise-like, drift resistant droplets. No pre-mixing of heavy, hard-to-handle chemicals. No wind drift. Oily, wash-off resistant droplets are deposited right in the target area. Waste is minimized. You cover more acres per day more effectively with fewer refills. Want details? Just call your local Myers Sprayer Dealer, or write:

Myers ... the finest name in power sprayers

THE F. E. MYERS & BRO. CO. SUBSIDIARY OF
400 ORANGE STREET • ASHLAND, OHIO 44805 **McNEIL**
CORPORATION

*Trademark of Hercules, Incorporated, Wilmington, Delaware

in South Carolina.

ACCURACY—"We can hit within two or three feet of an imaginary line," said Mobley. "And because of the drift control we have, we can operate in 10 to 15 mph winds, generally speaking." Conventional rigs would have to shut down if the wind were half that velocity.

EFFICIENCY—"I would say our efficiency is 10 to 20 times that of other systems," Mobley estimated. "We use less material. And once the material hits the target, Mobley continued, it clings longer, allowing the chemical to take effect. "If we get the spray on one to two hours before a rain, we're in good shape," he said. In isolated cases, the chemical has taken effect even though a good rain came just 30 minutes after application, he reported.

An additional benefit in the right conditions, he added, is that we get some brush control from fall-back. We've killed 8-10-foot brush this way."

SPEED OF APPLICATION—"We did one job in 12 days that would have taken a tree-trimming crew three months to do."

LOWER COST—Considering time for completion, less material used, and length of effectiveness, Mobley

estimated that the TurboTrim is from 50% to five times cheaper than hand trimming.

Trailer Spraying Foam On Turf Gets Attention

Where the TurboTrim gets stares of wonderment, another Mobley conceived and constructed spray apparatus gets stares of puzzlement.

With increasing frequency, unenlightened spectators see a tractor pulling a flat-bed trailer over pasture and golf courses spraying a thick white foam that seems to come from nowhere.

"Where's your tank?" they ask," reported Don Telge, manager of the chemical weed and brush control department. On close inspection, the 400-gal. tank is determined to be the box-like structure supporting the flat-bed.

The one-man rig is uniquely practical. To get to the job, the operator drives the truck pulling the trailer-sprayer that doubles as the carrier for the tractor. At the spray site, the operator drives the tractor off the trailer, hitches trailer to tractor, and takes off spraying. But again,

the rig is not the best part of the story.

Herbicides With Foam

"We're using foam to apply 2,4-D and MSMA on golf courses, along fire walls, and pastures," said Telge. "I worked with the developer of the product, Norman Sachnik. I experimented with it when I worked as a ranch manager, then joined Range Engineering Co. to look for sales outlets."

The search also found Telge a job at the Mobley Company. Sachnik has since changed the name of his company to Mano Company and is headquartered in Houston.

The foaming agent is called Foam-wet. A special nozzle sucks in air to create the foam mixture. One gallon of water at 200 psi, said Telge, makes three or more gallons of foam.

"Foam stays on four to five times longer, increasing the effectiveness of the chemical used," said Telge. "It won't run off as water does."

"This means you can use less water—perhaps 50% less."

A veteran sprayman "can just tell a good job from a bad one with water," said Telge. "But it's much

PATENT APPLIED FOR

roll after roll slab after slab day after day

The Nunes Mechanical Sod Harvester and 3 men can lift, roll or slab and palletize up to 1000 sq. yds. of sod per hour. Field conditions, terrain, soil, sod, are easily and quickly adjusted for, while in operation, with hydraulic controls.

Write for detailed brochure.

Orders now taken for spring delivery.



NUNES
SOD HARVESTER

THE JOHN NUNES MECHANICAL HARVESTING CO. 2006 Loquat Ave., Patterson, California 95363, Phone (209) 892-8776

easier to see coverage with foam. More important, the customer can easily see what kind of coverage he's getting."

Telge has noted that browning comes a little slower, in some cases, than with water—6 to 8 days, instead of 4. "What we are getting, though, is translocation kill instead of dessication kill."

Vegetation Control Work Expanding

TurboTrim and foam spraying are just two of the innovations that come with regularity for the steadily expanding 27-year-old Mobley Company.

The firm that John Mobley, Jr., started in 1943 as an oil tank cleaning and oil hauling business has changed dramatically, as sons John III, Tom and David added their talents.

To provide off-season work for employees in the trucking end of the business, Mobley Company entered the weed control field in 1958. Activities were soil sterilization and brush control, primarily for the petrochemical industry.

"Vegetation maintenance is the fastest growing segment of the business," said Tom Mobley, "now accounting for roughly half of annual volume.

All but one of the Mobley divisions operate from Kilgore. Applied Chemicals Division operates from Beaumont. Other divisions are the Transport Division, Mobley Chemicals, Inc., and Southwest Disposal, Inc. Sales offices are maintained in Dallas and Austin.

With the exception of the purchase of the Walker Chem-Spray Company about five years ago, all new operations have been created and developed. From five trucks in 1961, the total at last count was 61 pieces of rolling stock.

A flat-bed trailer, tractor, pump, engine and hose—and Don Telge, right, (with Tom Mobley) is ready to apply foam spray to turf. But that's not quite all of the equipment description. Look closely, and you can see a 400-gallon tank as a part of the flat bed. This specially built trailer has a 6,000 lb. axle and 3,200-lb. carrying capacity tires. Gerald Sossamon directs the foam stream at 200 psi. Foam is achieved with the foaming agent, Foamwet, and a special nozzle attachment with air intakes. Foam application of MSMA and 2,4D is used on golf courses and pastures. Coverage is easily visible as shown below, and chemical stays on the leaf four to five times longer. One gallon of solution makes about three to four gallons of foam, says Telge.

