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...goner tomorrow

Ethion kills chinch bugs . . . ends destruction to lawns, parks and fairways. Ounce-for-ounce no pesticide outperforms it. Tests show just one application gives outstanding results and provides total control. And Ethion is easy-to-use, safe, economical, long lasting. U.S.D.A.-approved to curb sod webworms, halt mites in Bermuda grass, too. Write or call your supplier today for details.



TECHNICAL CHEMICALS DEPT., NIAGARA CHEMICALS DIVISION, MIDDLEPORT, NEW YORK

easy turf and weed control—

with a famous

FONTAN

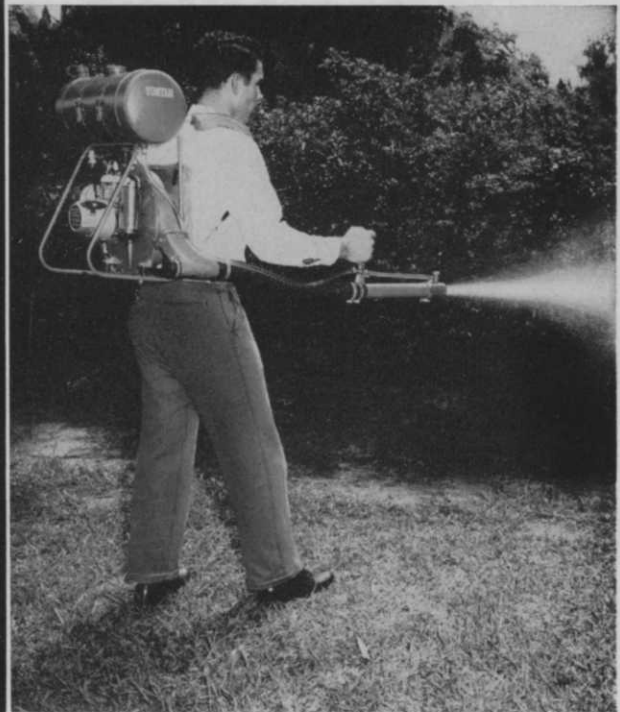


**THE R.5 FONTAN FOR HEAVY DUTY
WEIGHT 37 LBS.**

A self-contained unit, the Fontan has jets to interchange for misting or spraying, another attachment to interchange for dusting. Designed for versatility, dependability and safety, the Fontan has metal frame and padded straps for comfortable operation.

FONTAN + MALATHION = ECONOMY

The Fontan adjusts to allow low-volume spraying with less dilute liquid and a higher concentration of Malathion or other chemical. Both Fontans offer complete portability, choice of droplet size, easy maintenance, safe fuel injection, corrosion-resistant plated parts.



**THE R.6 FONTAN FOR SMALLER JOBS
WEIGHT 24 LBS.**

A torch interchanged with the spray head and nozzle converts either Fontan into a flame thrower for weed killing, snow removal, burning off paint, heating tar for roofs and street repairs, and numerous similar tasks.

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DISTRIBUTORS OF
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EQUIPMENT AND
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 the amount of business you do
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ALL IT TAKES IS A SIMPLE LOW COST

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GENERAL SPRAY LEASE-EXPANSION PLAN

SETS YOU UP IN A TIE-IN BUSINESS THAT'S MADE A PHENOMENAL GROWTH!

Gives your homeowner-customers complete lawn, garden, shrub and tree care . . . gives you a profitable new business line for minimum investment, maximum expansion. LEASE the amazing GENERAL SPRAY LAWN & GARDEN MACHINE—that kills crabgrass, weeds . . . limes, fertilizes, seeds lawns . . . destroys ants, grubs, chinch bugs and over 200 other pests the unique General Spray hydromatic way. This revolutionary machine is magnificently engineered for top efficiency . . . uses the same spray techniques you are familiar with . . . may even replace some of your present outmoded machinery . . . AND LETS YOU OFFER THIS COMPLETE SERVICE TO THE HOMEOWNER FOR AS LITTLE AS \$1.75 WEEKLY. The efficiency of the beautifully equipped brand new truck is so great . . .

YOU NET UP TO HALF YOUR GROSS.

And here's an opportunity that's really on the grow! Our business quadrupled in '61 . . . expanding swiftly with a suburban market which will represent 85% of the total population in your lifetime. GENERAL SPRAY—publically owned, the largest company of its kind in the world—let's you lease now for expansion purposes . . . buy when you've proven in big dollar volume what success this can mean for you!



1000 SQ. FT. OF LAWN IN LESS THAN 3 MINUTES!

HIGH PRESSURE GUN SERVICES TREES, SHRUBS:

"6 JET"-SUBSOIL APPLICATOR:

AMAZING SAF-T-WEEDER

GENERAL SPRAY SERVICE, INC.

Dept. PC-6, General Spray Bldg., Katonah, N. Y.

Gentlemen: Please send me full details on your lease-expansion plan, without obligation.

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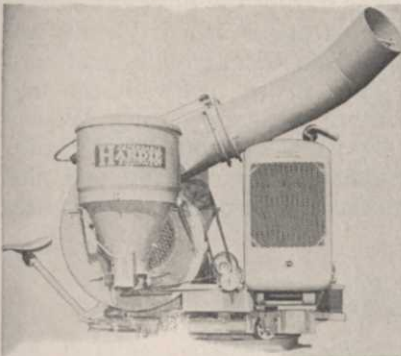
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HORIZONTALLY . . .



**YOU ALWAYS GET
PERFECT PERFORMANCE . . .
WITH THE DEPENDABLE . . .**



**HARDIE AERO-MIST
SPRAYER DUSTER**

Here's the one unit that gives you just what you want . . . when you want it. The famous Hardie Aero-Mist Sprayer. It embodies the recommendations of State & Federal authorities; tree service organizations and foresters who sought in one unit a high-velocity ample air volume sprayer for any type job, along with low price.

With its high velocity, 150 mph, it is of special value in the treatment of trees infested with the bark beetle. Public Health officials also use the Hardie for mosquito control. With the attachment of the Hardie Duster, you have two machines in one. You can use either spray materials; dust or granular materials. Write for full details.

**HARDIE
SPRAYERS**
AMERICAN PULLEY CO. DEPT. PC
4200 WISSAHICKON AVE. PHILA., PA.

WEEDS and TURF
PEST CONTROL

A SECTION OF PEST CONTROL MAGAZINE

May, 1963

Features

How We Built a Whole Fleet of
Lawn Spray Trucks
By Larry Nipp W-10

Dutch Elm Disease:
Cause, Precautions W-12

Tritac: New Weapon for
Weed Control
By L. S. Whitcomb W-14

How to Identify and Control
Chinch Bugs W-16

Estimate '63 Lawn Pest
Infestations at Annual U. of
Mass. Turf Conference W-26

Departments

W & T Mailbox W-6

Meeting Dates W-24

Know Your Species W-28

Trimmings W-30

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What's a CA?

What is a contract applicator? The question is not a facetious one, because a cloud of confusion seems to hang over the proper name for firms which spray weeds, turf, ornamentals, or trees on a contract basis.

Some publications refer to "custom applicators," but we have avoided this term because it has come to refer primarily to agricultural operators. It is felt that some distinction should be made between these crop sprayers and their urban/industrial counterparts.

We've also heard "contract sprayer," "lawn pest controller," "horticultural sprayman," etc.

Of these three, we favor the last, but it is almost too cumbersome to use with ease.

Last month we talked about the necessity to tell the public, (and suppliers) about the thriving outdoor spraying market. This cannot be done effectively unless industry men agree on a common term for the men who guide weed control and turf spraying companies.

Since the advent of this magazine, our staff has favored the expression "contract applicator," because it implies that work is done on a "spray-for-pay" basis, and that application of a substance is involved (the materials applied, of course, range from insecticides to herbicides, to fertilizers, etc.).

After ten issues of *Weeds and Turf*, we've noticed the expression, with its convenient abbreviation "CA," is being picked up and used by suppliers, educators, and industry men alike. All that's necessary now, it seems, is some kind of formal recognition of the term.

Applicators, and their customers and suppliers, will all benefit from this industry standardization.

We hope this editorial will make each reader aware of the need to identify himself. Those who object to "CA" or who have other suggestions are invited to correspond with the editor.



with NEW
AQUATHOL PLUS

Here's a remarkable new addition to our line of aquatic weed killers. Aquathol Plus can rid ponds and lakes of 25 different weed species. When used as directed it is...

- **NOT HARMFUL TO FISH,** fowl or aquatic animal life.
- **EASY AND NON HAZARDOUS** to apply in liquid or granular form.
- **FREE OF TOXIC BUILD-UP...** leaves water usable for recreation.
- **EFFECTIVE AND FAST ACTING** for spot or complete lake treatment.

Contact your supplier or mail coupon for helpful brochure on aquatic weed identification and control.

Pennsalt Chemicals
ESTABLISHED 1920

PENNSALT CHEMICALS CORPORATION
Department PC

309 Graham Bldg., Aurora, Ill.
P. O. Box 153, Bryan, Texas
3239 Mayfair Blvd., Fresno, Calif.
P. O. Box 1206, Montgomery, Ala.
2901 Taylor Way, Tacoma, Wash.

Please send me your Aquathol folder. I'm interested in treating:

Pond Lake Dock or Beach Area

Approximate size of area to be treated

.....

Name.....

Address.....

City..... Zone..... State.....

— **W & T Mailbox** —

Extensive Coverage Startling

Coverage of the 17th Annual Northeastern Weed Control Conference by *Weeds and Turf* (W&T, Jan. '63, p. W-22) was quite startling in its length and detail. The executive committee of the NWCC was completely overwhelmed and appreciative of W&T's efforts on our behalf.

I feel quite sure that a fair number of people attended our conference this year as a result of having read about it in *Weeds and Turf*. And, of course, one of the largest sections was the one dealing with industrial weed and brush control.

Dr. John A. Meade

Secretary-Treasurer
Northeastern Weed Control Conference
University of Maryland
College Park, Md.

W&T Proves Useful

As the off-campus educational arm of the U.S. Department of Agriculture and the College of Agriculture, Ohio State University, one of our responsibilities is with the professional grounds maintenance workers. We conduct 3 to 4 programs throughout the year dealing with management of turf and ornamental plants. The big part of this program is weed control.

Already we have used the information in *Weeds and Turf* on MH-30 (W&T, Sept. '62, p. W-1) to help a large utility company with a problem on grass control.

Fred K. Buscher

Area Extension Work
U.S. Dept. of Agriculture
Cleveland, Ohio

Who Supplies Tricalcium Arsenate?

I have enjoyed reading your *Weeds and Turf* section very much. Perhaps you would know of a supplier of tricalcium arsenate whom I could contact. If so, would you send me the name and address?

It seems that public interest in maintaining lawns is increasing, and that we are receiving more calls for this type of work. Unfortunately, many of us have little experience in controlling crabgrass

and broadleaved weeds in lawns. Any information you might send would be appreciated.

Richard L. Parker

Craig Pest Control Co.
Ponca City, Okla.

We do not make a practice of recommending individual distributors, but we would like to refer you to page W-10 of the October issue of Weeds and Turf, which contains a suppliers' guide. On this page, you will note that a number of suppliers of tricalcium arsenate are listed. Each supplier will probably be able to give the information you desire. Ed.

Green Dyes Available?

We are interested in obtaining information regarding the types of green dyes available for coloring lawns during the dormant season.

Most lawns in this vicinity are composed of Bermuda, and turn a light brown color in the fall, winter, and early spring. We feel a service of this sort would greatly benefit our organization, and offer another means of lucrative service.

R. E. Powell

G. Edward Chase Co., Inc.
San Diego, Calif.

Perhaps suppliers of green dye for lawns will communicate directly with Mr. Powell. Ed.

W&T Gives Fine Presentation

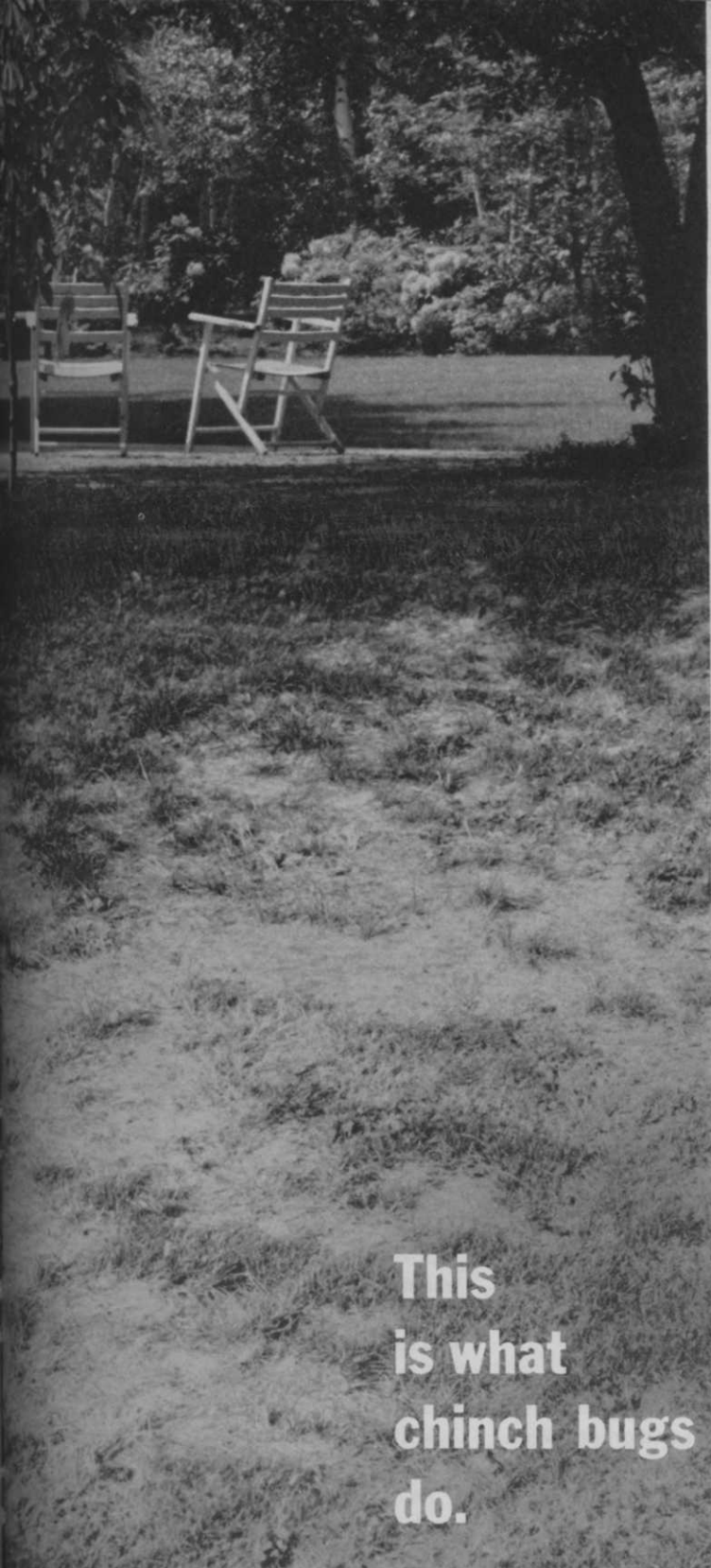
I would like to congratulate *Weeds and Turf* on the fine presentation on the urban/industrial weed control business. This is something that has long been needed by contract applicators.

As an older member of this industry, having started in Ontario in 1945, I frequently wished for information which I have since found in your magazine.

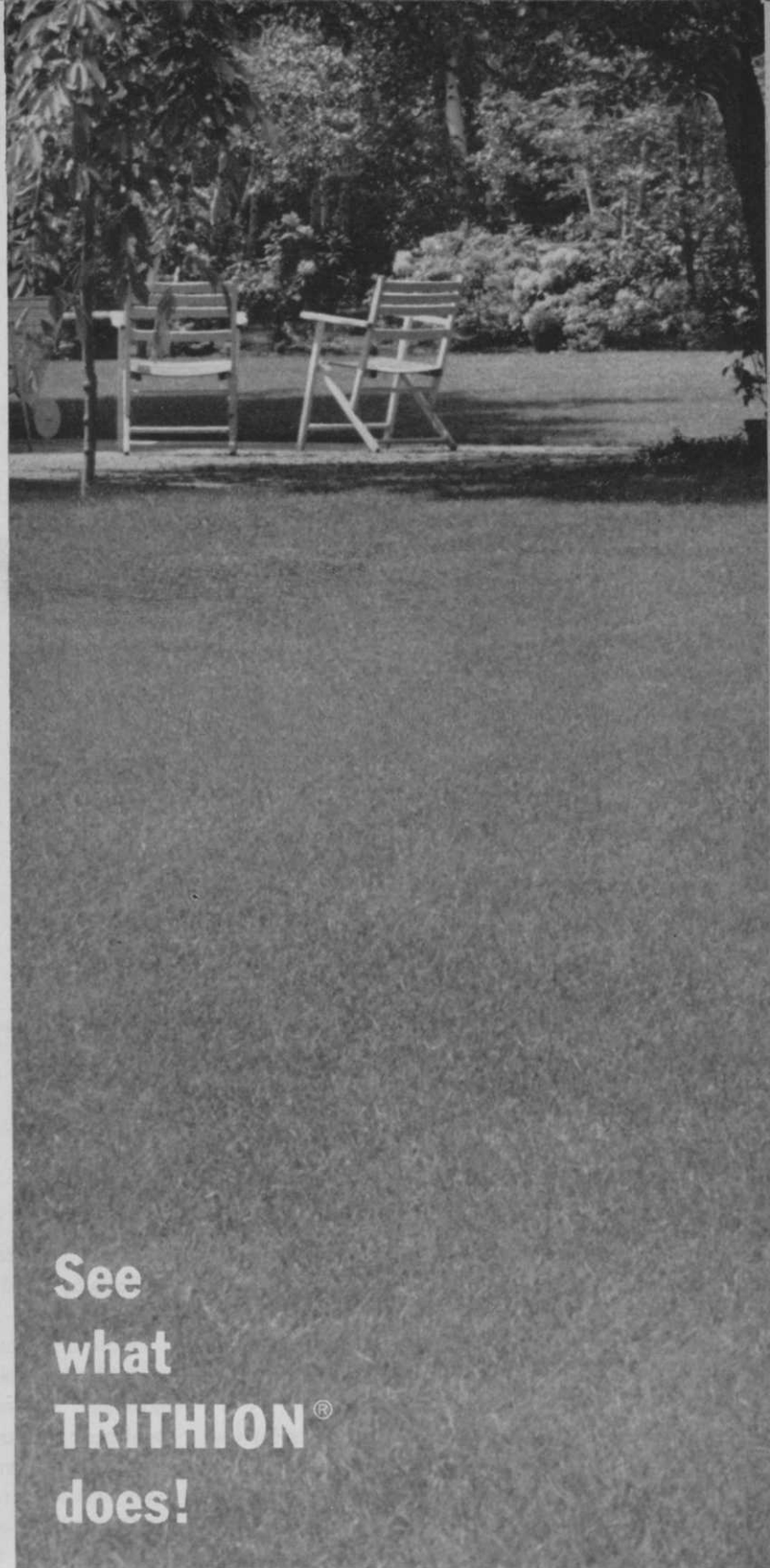
D. Parker-Sproule

Thumb Weed Spraying Service
Harbor Beach, Mich.

Weeds and Turf welcomes expressions of opinions from its readers. Send ideas and comments briefly as possible to Charles D. Webb, Editor, Weeds and Turf, 1903 Euclid Ave. Cleveland 15, Ohio.



This
is what
chinch bugs
do.



See
what
TRITHION®
does!

Customer satisfaction—permanent patronage—requires sure, consistent results: the kind you can guarantee when you use TRITHION insecticide for lawn chinch bug control.

Chinch bugs are small sucking insects that feed on the juice in leaves and stems of grass, causing brown patches and eventual death of infested lawns. Chinch bug destruction is a growing problem around the country . . . but one you can solve with TRITHION.

Since 1960, thousands of lawns have been treated with TRITHION. Results have been outstanding!

TRITHION gives quick, positive control. It's a fast-acting compound that controls all chinch bugs, even those resistant to other materials.



TRITHION is easy to handle safely. It is less hazardous to handle than many other organic phosphate pesticides. TRITHION is an easy-to-apply emulsifiable liquid . . . and also is available in granular form.

TRITHION offers one-shot control . . . that lasts. Repeat applications are rarely needed with TRITHION—"one-shot control" stops chinch bugs. Its long residual action means long-term protection . . . with resulting reduced costs.

Use TRITHION on your customers' lawns. You'll boost and maintain the demand for your service. For details, write Stauffer Chemical Company, Agricultural Chemicals Division, 380 Madison Ave., New York 17, N. Y. ©Stauffer's Reg. T.M. for an insecticide-acaricide

BOXED IN?

TRYING to sell your weed and turf chemicals or equipment without adequate promotion?

Feel boxed in by competition? Confused by market diversity? Disgruntled with your market coverage?

If you manufacture products for the multibillion dollar weed control and turf and ornamental spraying market, you can reach every segment of the industry through the advertising pages of *Weeds and Turf*.

Contract sprayers.

Highway officials.
Railway and utility weed control men.

State and local officers.
All these men have something in common: they're interested in weed control or care of turf and ornamentals.

They have something else in common: they influence purchasing decisions.

Or do the buying themselves.
You should tell them your story. *Weeds and Turf* is the place to tell it. *Weeds and Turf* has unparalleled

reader acceptance. Readers say, "we use the magazine."

Why? We speak their language. We're growing up with the industry. We anticipate problems and help the reader solve them.

In short, we try to help the contract sprayer make more money.

He spends it on more chemicals and equipment.

Want him to spend it on yours? Write us for the facts, including ad rates, market bulletins, other material.

WEEDS and TURF
PEST CONTROL

TRADE MAGAZINES, INC.

DEPARTMENT C-5

1900 EUCLID AVENUE

CLEVELAND 15, OHIO

W-8

WEEDS AND TURF Pest Control, May, 1963

WEEDS!

a menace to everyone / profits for you

There's money in weeds, if you're on the right side of them. And that's with any of the many Du Pont weed and brush killers. They make custom weed control jobs easy and effective. Check the typical problems below; chances are you'll see at least half of them within a mile of where you're standing. ■ The answers are easy, too, because Du Pont has a product to meet almost any weed control situation you'll encounter.



THE PROBLEM:
Hard-to-kill perennials
— Johnson grass,
Bermuda grass, nut-
grass and quackgrass.

THE ANSWER:
Efficient, long-term control of
grasses and weeds with HYVAR®
isocil weed killer, an entirely
new organic herbicide.



THE PROBLEM:
Rampant weed growth
in storage areas
causing fire hazards
as well as wood and
metal deterioration.

THE ANSWER:
A single application of KARMEX®
diuron or TELVAR® monuron
weed killers provides effective,
low-cost control of weeds and
grasses for a whole season.



THE PROBLEM:
Deep-rooted perennial
weeds—morning glory,
leafy spurge, Canada
thistle and others.

THE ANSWER:
Easier control of noxious weeds
than ever before with TRYBEN®
200 weed killer. Also
controls some woody plants.



THE PROBLEM:
Undesirable growth of
brush on plant sites,
roadsides, drainage
ditches, rights-of-ways.

THE ANSWER:
Economical control of brush with
safe, non-volatile, AMMATE® X
or with DYBAR® fenuron weed
and brush killer.



Only a few examples of the type of situations that mean opportunity for you are shown above. Product descriptions are necessarily brief, too—each of these Du Pont herbicides effectively control many other kinds of weeds or brush. For complete information mail the coupon to Du Pont today.

On all chemicals follow label instructions and warnings carefully.

DU PONT WEED

Better Things for Better Living... through Chemistry

& BRUSH KILLERS

Du Pont—I. and B. Dept., PC-53
Room N-2539, Wilmington 98, Delaware

Please send me more information on Du Pont weed
and brush killers.

NAME _____

COMPANY _____

ADDRESS _____

CITY _____ STATE _____

When Writing to Advertisers Please Mention WEEDS AND TURF

W-9



A built-in plus value of this gleaming spray rig is the lack of any spray drift (as shown above), author Nipp contends.

How We Built a Whole Fleet of Lawn Spray Trucks

WE STARTED in the lawn spraying business here in the Fort Lauderdale area with a 200-gallon spray tank and an 18-GPM pump.

As our business grew, we found we were spending too much time filling the tank, and we were working the pump steadily at full capacity 8 to 10 hours per day.

At this point, we decided to get a bigger tank and pump.

All that was available for quick delivery then was a 300-gallon tank and a 20-GPM pump, so we bought them, knowing full well they were only a little better than what we were using, and far from what we really wanted. Six trucks later we realized that if we were ever to have exactly what we wanted we would have to design and build it ourselves.

Basically, this is what we had in mind: a truck that would spray all day, requiring only 2 fillings; and a truck that would enable us to spray each and every lawn that we came to with any combination of chemicals required and without delay.

In our operation, we have to be

By **LARRY NIPP**

American Power Spraying
Ft. Lauderdale, Florida

custom sprayers, yet do a *volume* business.

We had heard of the injection system, but this proved to be far too costly and cumbersome — not to mention troublesome from a maintenance standpoint. Finally, we came up with the idea of a “drop tank.”

In our case, a 225-gallon tank is mounted at the rear and under a 1200-gallon tank, with the lower tank to be quickly filled from the upper main one. By connecting the 2 tanks with a 2" line and a brass quick-opening quarter-turn valve, our problem was solved. With this hookup, we can fill the lower tank in one minute and 40 seconds. In addition, we installed a four-bladed agitator in the “drop” tank. This, combined with a “bypass” line, which goes into the “drop” tank, furnishes far more agitation than we will ever need.

In the beginning we decided we wanted a pump large enough so we would never have to work it at

full capacity. We also had in mind a slow-speed pump, one that would take little gas to operate.

We finally settled on a popular-make 35-GPM pump. This pump was set to turn at only 70 RPM; and in actual tests with 200 feet of ½" hose and a gun tip 65-70 with pump pressure setting of 650 lbs. PSI, we got a pressure of 150 lbs. PSI at the gun and an output of 9 GPM from the tip. This enables us to apply 200 gallons to a lawn in a little over 20 minutes. By way of comparison, on a previous truck we had a high-speed pump with the same pressure setting, same amount of hose, and the same gun and tip. Now, with this new setup, we could also apply approximately 9 gallons per minute.

But here is the catch. On an average day this pump required 8 gallons of gas to operate. The cups on the pump had to be replaced at least every 3 months, not to mention other, more costly, repairs such as procelains, springs, etc. Over the period of a year, maintenance cost on the pump alone on the older outfit amounted