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Chinch bug destruction is a growing lawn and turf problem around the country. This insect is causing wide-spread damage not only in Florida, but along the Gulf Coast, through the Middle Atlantic states and into southern New England.

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Remember, ASPON is now available to commercial spraymen. Offer the experienced application of the most effective chinch bug control available: ASPON. Get all the details—Fact Sheet, specimen label, summary of test data, chemical, physical and toxicological properties. Write or call the nearest Stauffer Chemical Company office: 380 MADISON AVENUE, NEW YORK 17, N. Y. • P. O. BOX 5388, TAMPA 5, FLA. • P. O. BOX 7222, HEIGHTS STATION, HOUSTON 8, TEX. • 1300 E. DAVENPORT ST., WESLACO, TEX. • P. O. BOX 509, NORTH LITTLE ROCK, ARK.

WEEDS!

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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 vegetation with HYVAR® X bromacil 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: Easy control of noxious weeds than ever before with TRYSBEN® 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 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.

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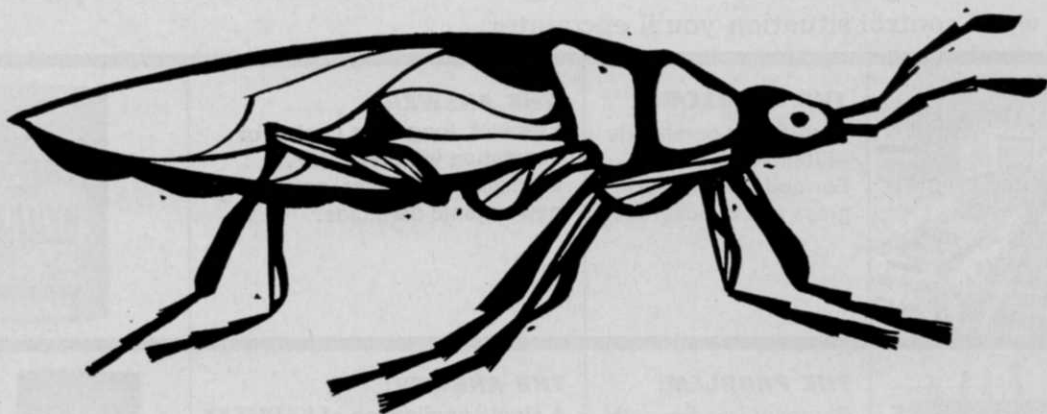
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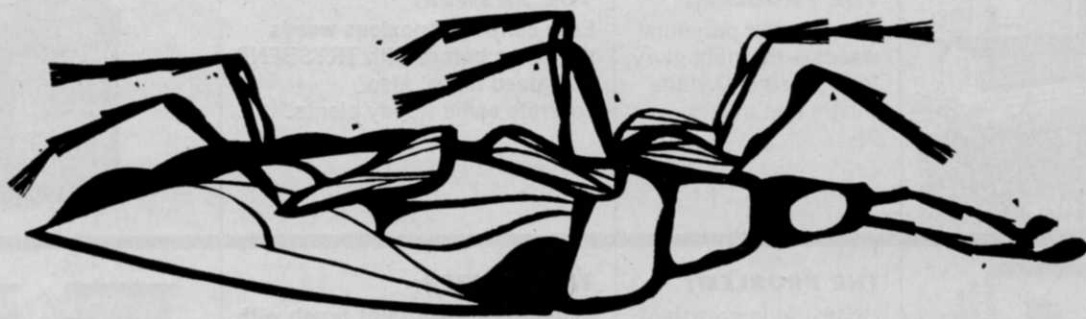
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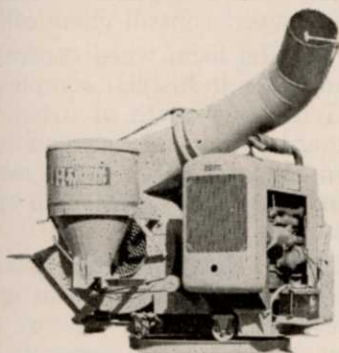
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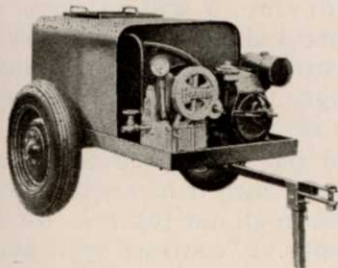
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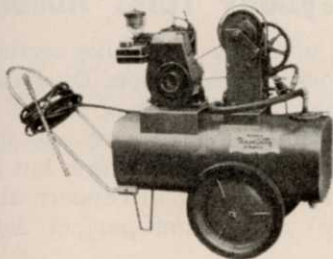
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WEEDS and TURF

February 1964

Volume 3, No. 2

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WEEDS AND TURF is the national monthly magazine of urban/industrial vegetation management, including turf maintenance, weed and brush control, and tree care. Readers include "contract applicators," arborists, nurserymen, and supervisory personnel with highway departments, railways, utilities, golf courses, and similar areas where vegetation must be enhanced or controlled. While the editors welcome contributions by qualified freelance writers, unsolicited manuscripts, unaccompanied by stamped, self-addressed envelopes, cannot be returned.

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Battle Royal

ELSEWHERE in this issue is a news story which reveals the acquisition, by U. S. Borax & Chemical Corp., of the Reade Manufacturing interests.

USB spokesmen say the move will enable the giant firm to offer coast-to-coast contractual weed control for railways, and will also permit the more thorough marketing of weed control chemicals.

What this means for the local weed controller is obvious. More and more industrial complexes, taking note of the dynamic growth of urban/industrial vegetation management, are reexamining their sales policies, and at least half a dozen *major* chemical manufacturers are in a position to offer contract applications.

This is as it should be. Nevertheless, it means a battle royal for the local operator, who must now pit his energies and his wits against the smooth and powerful mechanics of corporate organization.

Personalized service, a will to serve, and knowledge of local peculiarities are just a few advantages the small firm has to offer. Of course, there are disadvantages too, but we feel there's a place for both kinds of operations.

We are convinced the USB move augers well for the entire industry, since it is a profound expression of confidence in all our futures. We welcome them to the ranks of "contract applicators."

Everybody Talks About It

We were talking with the executive secretary of the National Arborists Association, Dr. Paul E. Tilford, recently when the subject of safety records came up. Not that arborists are any more guilty than some other types of readers; but it is true that the industry shows great concern about what is apparently a less-than-perfect safety record.


Safety is like the weather, anyway, but in this case it *does* help when everybody talks about it: in fact, that's one way to get better results in safety programs.

Company managers must constantly be thinking about safety records, and this concern should be expressed in frequently held staff meetings so foremen and crew supervisors will know their superiors are worried about the wasted time, and needless pain, of accidents which could have been avoided.

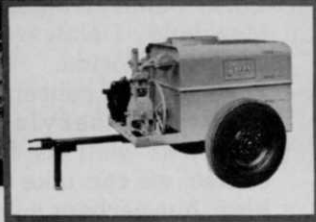
Every company president knows that lost-time accidents are translated into lost profits; then the loss ratio is compounded by increased insurance and state compensation rates. This is a simple, obvious, undeniable fact.

Yet accidents persist.

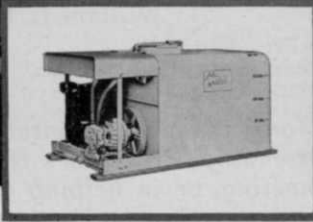
We recommend that managers and workmen alike take a close look at how they do their jobs this year, and so end the needless waste of on-job accidents.

leadership  *engineering* pushes performance up - prices down

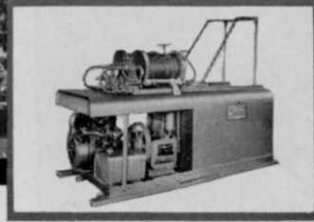
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It pays to learn the 3-R's, because the knowledge can help you save time and money, do more profit-making jobs, and help you get your jobs done better and sooner. What jobs? Ah, there's the key! Jobs like shade tree spraying, brush and weed control, dust abatement. Close to the soil tasks like liquid fertilizing, lawn insect and turf disease control, root feeding. Clean-up jobs like sanitation spraying, mosquito and insect control. Fringe benefits like equipment cleaning, water-soluble paint spraying, many more. With John Bean High-Pressure Sprayers, you have the power to do the jobs thoroughly and quick. You have Bean-Bond corrosion-resistant tanks, ceramic pump cylinders, and many other Leadership-Engineered features to insure durability and dependability. Now, go back and add up the models. Forty-one (and we didn't even count several engine options)! That makes it as simple as ABC to look through the 3-R's and pick the one that's exactly right for you. May we help you pick?

LEARN THE 3-R's. First lesson is writing for catalogs on the models that interest you most. Just clip this coupon to your letterhead and mail.

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Wants National Group

As a note of general interest to your subscribers, our organization (Pesticide Sprayers Association Inc. of Portland, Ore.) is a very active association which meets monthly on the first Monday. Our chief aim is to educate ourselves and the public in the safe, effective use of pesticides. We have our own county agent on our board of officers and keep a full slate of top experts on our meeting agenda as speakers and sources of advice.

Last fall we met with the Seattle group (Washington Ground Sprayers) and plan to host a Northwest Regional Meeting here in Portland next September. More information on that later. We have previously discussed a regional and even a national association as things to point toward in the future. These are developments which must come for the good of the industry.

Your publication is read with much interest here.

William L. Owen

Vice President
Pesticide Sprayers Assn. Inc.
Portland, Oregon

If any readers are interested in attending Mr. Owen's regional meeting, or in helping establish a national or regional group, we suggest writing him at 8520 S.E. Hood, Clackamas, Oregon. Ed.

Aquatic Reprints?

I would like to receive the first two articles of the series of three dealing with aquatic weed control. We are at present a subscriber to *Weeds and Turf* but were not when the first two installments of the series were published.

Robert M. Stern, Ph. D.

Director of Research
Great Lakes Biochemical Co., Inc.
Milwaukee, Wis.

This letter from a midwestern aquatic weed control company is typical of scores of inquiries we've received about our series on aquatic weed control. Indeed the response has been so gratifying that we intend to make the

entire series available as a single reprint sometime in the early part of the year. Availability and price for the reprint will be announced in W&T as soon as possible. Ed.

Where to Buy Thatch-O-Matic

Your September issue contains an article on de-thatching (Business Opportunities in Turf Reseeding, p. W-17) which has possibilities. Please tell us where we can get further information on the Thatch-O-Matic.

Walter Rhoads

Gold Coast Power Spraying
Pompano Beach, Fla.

The Thatch-O-Matic is manufactured by the Parker Sweeper Co., 91-99 N. Bechtle Ave., Springfield, Ohio. The firm will be happy to furnish further details to anyone who writes. Ed.

Sales Leads . . .

Please advise if you have information on firms which offer industrial weed control services in the following states: New York, Pennsylvania, Michigan, Maryland, Delaware, New Jersey, and Florida.

We have a concern that is interested in service in these states, as well as in Ohio. Of course, we can take care of them here, but perhaps some other operators will want the contract in the above states.

L. A. Smith

President
Azo Chemical Co.
715 Ninth St. N.E.
Canton, Ohio 44704

Of course subscribers to WEEDS AND TURF magazine include thousands of contract application firms, and probably all these with offices in the above states would like some more business. However we do not feel it proper for us to single out one such firm over another, so we're printing Mr. Smith's letter in hopes interested CAs will write to him directly. Ed

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, 1900 Euclid Ave., Cleveland, Ohio, 44115.

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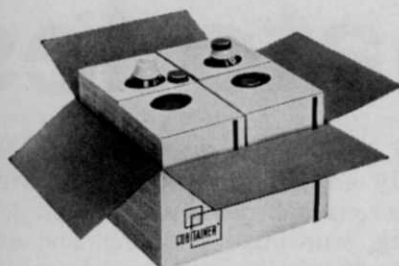
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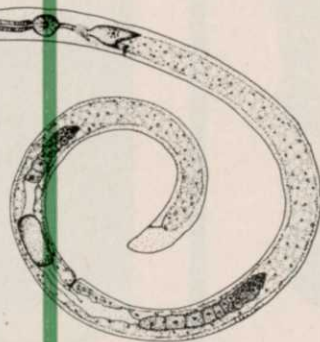
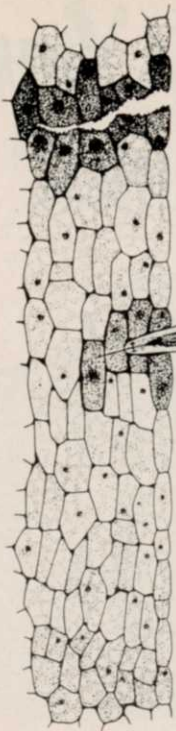
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Semidiagrammatic drawing of nematode courtesy Dr. Houston B. Couch (Pennsylvania State University) author of *Diseases of Turf-grasses*.

What Turf Managers Need to Know

About

Nematodes

AWARENESS of nematode damage in turf has been steadily increasing. It is evident that homeowners and others concerned with decorative and useful grasses are going to call upon contract applicators for nematode control service as the demand for fine turf increases. To meet this anticipated demand, CAs will have to assimilate increasing amounts of diversified control information, both biological and chemical.

A quick examination of the nematode's place in the scheme of nature will help orient the reader to the subject of nematodes. These animals have such unusual characteristics that some experts have placed them in a grouping by themselves. Since no close relatives of nematodes can be found, they are placed in Phylum Nemata. *Phylum* is a primary grouping of plants and animals with similar characteristics, assumed to have descended from a common ancestor. For example, those animals with jointed legs and external skeletons (insects, spiders, crustacea) are placed in the Phylum Arthropoda.

Nematodes are suspected to be the most numerous form of animal life on earth. One acre is estimated to hold hundreds of millions of individuals. It has been said that they are second only to arthropods in the destruction they cause. A major importance stems from the fact that they are, as a group, parasites of man and animals in addition to plants.

Nematodes are causal organisms for "creeping eruption," a skin ailment familiar to termite operators. The eruption results when a cat or dog parasitic nematode called a hookworm burrows into a human, while he crawls in an area in which pets loaf. Certain nematode species also cause elephantiasis, entering man through a bite of an

infected mosquito. Trichinosis in man is caused by eating improperly cooked pork infected with nematodes. Numerous self-descriptive plant ills (root-knot, wilting, stunting, yellowing, and decline) may be caused wholly or in part by plant parasitic nematode feeding. In this discussion, we will focus on those which parasitize or otherwise affect plants, specifically turfgrasses.

Plant parasitic nematodes have slender, unsegmented, translucent, colorless, legless, wormlike bodies which move in a whiplike fashion. Some mature female sedentary parasites, such as the root-knot nematode, and cyst-forming nematodes, lose their slender form and become lemon-shaped, pear-shaped or sometimes almost spherical. In general, adult plant parasitic nematodes measure 1/60 to 1/16 inch long. The nematode body is equipped with longitudinal muscles, a nervous system, a digestive system, and reproductive sys-

Results of another
Weeds and Turf
field research project.