### DUPONT CAN HELP YOU STOP WEED POLLUTION PROBLEMS!



### Slash maintenance costs Cut fire hazards Reduce equipment losses Improve plant appearance

Use of a chemical control program based on Du Pont weed and brush killers is a fast, effective and cost-saving way to eliminate unwanted weeds and brush . . . and the many problems they cause.

To help you solve these problems, Du Pont has developed recommended weed- and brusncontrol programs designed for your area. The base of these programs is, of course, time-proven and dependable Du Pont HYVAR® bromacil weed killers. They are available in wettable powder form as HYVAR X, in easy-to-use liquid form as HYVAR X-L and as dry pellets as HYVAR X-P. Du Pont approved products containing bromacil also may be used to provide excellent control.

Let us show you how HYVAR bromacil weed and brush killers can work into your vegetation control programs. Write today for printed

With any chemical, follow labeling instructions and warnings carefully.



recommendations of programs designed specifically for your geographic area. Get the facts now and put a stop to weed pollution.

Du Pont Company
Industrial and Biochemicals Dept.
Room N-22316-3
Wilmington, Delaware 19898

I need more information about Du Pont chemical control of weed pollution.

Send literature and industrial weed control recommendations for my area

Have Du Pont representative call

Name			
Company/Dept.			
Street	 and here		
City/State	-	Zip	

# How to get the most for your saw chain dollar

Only your Oregon saw chain dealer offers you nine ways to go—with the Oregon team of saw chains, Power Mate bars, sprockets and accessories. Want high performance in a special situation? You don't have to "make do" with a general purpose chain. Oregon's high-quality, value-packed timber cutting products let you choose the right one for *your* job—land clearing and maintenance of golf courses, parks and utility right-of-ways. All Oregon products carry a Life Long Guarantee.

OREGON-a cut above the rest.



CHAIN SELECTOR CHART Performance **Filing Method** Requires Special Filing Rec-Wood Cut ommend Round File Cutting Job Cutting Saw Size Smoothper Chain Chain and Holder Technique Speed ness Remarks Fastest, smoothest chain made. For wood under 30" diameter. Use top file guide or sharpen automatically on saws equipped with "Power-Sharp." Competition (for use in 80 Serie 2 cu. in larger 1st in 1st cutting contests) under 30' diameter 4 cu. in. larger Fastest "Big Timber" chain. Sharpen with a chisel file. Chisel 1st in 1st 2nd X wood over 3 Big Timber (wood over 30" in diameter) Preferred by pros in "Big Timber." File with a chisel file. No file holder required. Not a chain for the week-ender.  $\frac{1}{2}$ " pitch. Chisel 4 cu. in. larger 1st 1st X 1st A pro chain sharpened easily with a round file. Also available in chisel grind for sharp-ening with a chisel file .404" pitch. Super-Chisel 3 cu. in. larger 2nd 2nd 2nd X New design. A chain of the future. Comes in a variety of sizes. Easy maintenance with round file and holder. Excellent in all woods. Micro-Chisel 2 cu. in. larger 3rd 3rd 3rd X Micro-Bit 4 cu. in. larger 4th X Easy to sharpen. Not for small saws. 4th 4th Least expensive. Good general purpose chain. All sizes. ½" pitch standard on most gear drive saws. Chipper 1.5 cu. in. 5th 5th 5th X larger Pulpwood and 80 Series 5th 2 cu. in. larger 1st 1st X Automatically sharpened on saws equipped with "Power-Sharp" or use top file guide timber under 30" (See Line 1) in diameter Good in all woods. Easy maintenance with a round file. Also available in chisel grind. .404" pitch. Super-Chisel 3 cu. in. larger 2nd 2nd 2nd X New design makes this best all around performer. Easy maintenance with round file and holder. Fits most saws. Micro 3rd 3rd X 2 cu. in. larger 3rd Chise S-70 X 2-6 cu. in. 4th 4th 1st Long chain life. Fine all-around performer. pitch Least expensive.  $\frac{y_2^{\prime\prime}}{2}$  pitch standard on most gear drive saws. Easy maintenance. Chipper 1.5 cu. in. 5th 5th 4th X larger Limbing where kick-back is a problem .325" pitch. Automatically sharpened on saws equipped with "Power-Sharp" or use top file guide (See Line 1). 87 2 cu. in 1st 3rd larger Speed-Guard 2-6 cu. in. 2nd 2nd 1st X Long chain life, easy maintenance with round file and holder, 3%" pitch. Micro-Guard 3rd 3rd 2nd X 4 cu. in. larger .404<sup>4</sup> pitch. Designed for larger saws. Farm choring and occasional Automatically sharpened on saws equipped with "Power-Sharp" or use special guide for "Goof-Proof" filing (See Line 1). 80 Series 2 cu. in. 1st 1st 4th X larger use New design makes chain top all-around per-former. Fits all saws including lightweights. Micro-Chisel 2 cu. in. 2nd 2nd 2nd X larger Long chain life. Fine all-around performer. %" pitch. S-70 2-6 cu. in. 3rd 3rd 1st X 1.5 cu. in. larger Chipper 4th 4th 3rd X Least expensive. Easy maintenance.  $\frac{y_2''}{2}$  pitch is standard on most gear drive saws.

### Keep this chart

OREGON Saw Chain Division





Volume 10, No. 5

May, 1971

Gene Ingalsbe Editor

Arthur V. Edwards Editorial Director

Eric Lindsay Advertising Production

Hugh Chronister President and Publisher

Dan M. Humphrey Vice-President, Advertising

> D. D. Langley Director of Circulation

#### ADVERTISING SALES OFFICES

Cleveland, Ohio 44102 9800 Detroit Ave./216+651-5500 William Schmunk

Chicago, Illinois 60601 333 N. Michigan Ave./312+236-9425 John Kielp

> Shawnee Mission (Kansas City), Kansas 66202 6811 W. 63rd St./913+722-5900 Austin Schnacke

New York, New York 10017 757 Third Ave./212+421-1350 Russell Bandy

Columbus, Ohio 43212 1350 W. Fifth Ave./614+486-9638 James Murney

Lansing, Michigan 48906 4415 N. Grand River/517+372-5254 Paul Bundschu

Los Angeles, California 90005 The Eschen Company 3142 Wilshire Blvd./213+382-8391 Henry Eschen

> San Francisco, California 94104 The Eschen Company 57 Post St./415+781-7440 Rod McDonald

### Special for This Issue

Tale of Two Cities' Airports
A visit with the grounds superintendents at Chicago's O'Hare Field and Houston Intercontinental reveals 12 tips on vegetation management.
Gypsy Moth: Nature's Ecology Disrupter
Northeast U.S. is bracing for an even worse infestation of gypsy moths. This article discusses control approaches, including chemical, biological and physical.
When the Chinch Bugs Struck, They Called a 'Copter
Guy Tedesco, greens superintendent at the New Seabury, Mass., Country Club, describes how he used a helicopter to spray Aspon.
To Heal Wounds of Strip-Mining 34
Ralph Branson reports on a USDA and industry project in Caribou National Forest. The five-year study indicates which plants do best on phosphate-mined areas.
Golf Course Irrigates With 'Used' Water
Panther Valley Country Club of Allamuch, N.J., uses water from the community sanitary sewage treatment plant to overcome a water supply deficiency.
Young Man in a Hurry 42
Clarke Fenimore is proof that even in the space and computer age, you can still start a business on that proverbial shoestring.

#### **Regular Features**

Editorial: Why You Should Get Hip to Young People	
The National Greenscape	10 and 12
Meeting Dates	
Letters to the Editor	
Insect Report	
Industry People on the Move	
New Products	
Trimmings	
Index to Advertisers	
Classifieds	60

### The Cover

You can't recognize the uniqueness of the cover picture unless you're familiar with turf care in the area of Houston's Intercontinental airport. The picture was taken during the four- to eight-week period that crews have to get ready for grass. It grows the rest of the year. But that doesn't mean no mowing, as you can see. The boulevard approach to the Houston airport is being cut to a half-inch. It will be swept, then fertilized and seeded in some areas. Drainage ditches are getting pre-emergence herbicides. You will find about every kind of vegetation care going on at an airport, such as Houston Intercontinental and Chicago's O'Hare Field. The story begins on page 18.



WEEDS TREES and TURF is published monthly by The Harvest Publishing Company, subsidiary of Harcourt Brace Jovanovich, Inc. Executive, editorial headquarters: 9800 Detroit Ave., Cleveland, Ohio 44102.

Single Copy Price: \$1.00 for current and all back issues. Foreign \$1.50.

Subscription Rates: WEEDS TREES AND TURF is mailed free, within the U.S. and possessions and Canada, to qualified persons engaged in the vegetation care industry and related fields in controlled circulation categories. Non-qualified subscriptions in the U.S. and Canada are \$10.00 per year; other countries, \$12.00 per year. Controlled circulation postage paid at Fostoria, Ohio 44830.

<sup>©</sup> The Harvest Publishing Company, 1971, subsidiary of Harcourt Brace Jovanovich, Inc.



Member American Business Press Business Publications Audit



#### **Turf Establishment Hints**

### Conved Products Challenge The Elements



Steep Slopes, Ditches? Use CONWED® TURF ESTABLISHMENT BLANKET. It adheres to ground contours, protecting seed from moisture loss and temperature variance in areas unsuited for loose mulches ... steep slopes, ditches, channels.

Turf Establishment Blanket unrolls and is stapled over prepared seeded areas protecting the surface and seed from wind and water erosion. 50" x 200' rolls weighing just 21 pounds cut installation time.



Roadside? Golf Course? Park? Industrial or residential area? We'll help with your critical turf establishment needs. Write Conwed Corporation, 332 Minnesota Street, St. Paul, Minnesota 55101. Establish turf over broad areas quickly with Conwed<sup>®</sup> HYDRO MULCH. Forms a tough continuous mat that resists erosion, absorbs and retains moisture for fast germination.

Conwed Hydro Mulch also protects seeds from temperature extremes. Clean weed-free wood mulch mixes with water, seed and fertilizer for quick, economical application with any hydraulic mulching equipment. Green color enables constant coverage metering.



What About Those Critical Spots? CONWED EROSION CONTROL NETTING is the solution. This strong, lightweight plastic netting quickly unrolls and staples over seeded and mulched or sodded areas where erosion will most likely take its toll.

Roll widths of  $7\frac{1}{2}$ ', 12' and 15' let you choose the most efficient size for steep banks, side hills, ditches ... wherever extra protection is needed. And Conwed Erosion Control Netting gradually disintegrates, eliminating pick-up problems.



For More Details Circle (117) on Reply Card



The Dow Chemical Company, Agricultural Department, Midland, Michigan 48640

### Dursban insecticide gets you more bugs for your buck.

That means you'll not only wipe out chinch bugs and sod webworms, but more! You'll find a little Dursban<sup>®</sup> insecticide goes a long, long way. And Dursban won't leach, has excellent residual activity, even though it's degradable. It's safe, too-for all common turf grasses. Keep the holes out of your turf *and* out of your budget. Tell your contract applicator you want Dursban insecticide . . . the unsurvivable one.



### FOR MORE FACTS USE THE POSTAGE FREE CARD

You are invited to use the Reader Service card provided to obtain further information on equipment, materials or supplies appearing in this issue. This card is preaddressed and postage paid.

Your inquiry will be forwarded to the manufacturers in whose products you are interested.

### FOR MORE FACTS USE THE POSTAGE FREE CARD

You are invited to use the Reader Service card provided to obtain further information on equipment, materials or supplies appearing in this issue. This card is preaddressed and postage paid.

Your inquiry will be forwarded to the manufacturers in whose products you are interested.

#### Why You Should Get Hip to Young People

JUST WHAT IS your responsibility, as a businessman, to young people?

It is, though too briefly stated, to convince them your business is worthwhile. As an occupation. As a producer of a beneficial product or service. Otherwise, *they will do their own thing*. And their own thing may be in competition or in opposition to what you are doing.

We're getting around to asking: Do your public relations efforts include activities uniquely directed to young people?

These efforts should view young people from three premises: that they will become your customers; your employees; or will hold positions in the future that will affect the conduct of your business.

Involvement is the key word to getting better understanding of what you do, why you do it, and what the end results of your business efforts are.

Golf superintendent associations sponsor scholarships. Indiana Farm Bureau Cooperative Association, as a part of its "Safety Side of Pesticides" campaign, developed an essay contest for elementary and high school students. Cleveland's forestry department works with Boy and Girl Scouts of America and other youth groups who have conservation requirements. (A tree-planting project last spring brought out 1,500 young people.)

What about a young people's tour of your business? A tree- or grass-growing contest? A plant identification contest? Most youth groups have a community service requirement. How about a cemetery spruce-up campaign for Memorial Day? Many businesses cooperate with area vocational schools, offering employment to satisfy the curriculum's on-the-job training requirements.

You can think of a dozen more ways to involve young people if you will just take time to give it some thought. No time? Then how about getting a young person to give it some thought?

You in the industries this magazine serves have an unprecedented opportunity to favorably influence young people toward your profession. The "now words" are ecology and environment. These are outdoor things. This is your bailiwick. Author Odom Fanning in his new book, "Opportunities in Environmental Careers," (See The National Greenscape, pages 10 and 12 for publisher's address) says environmental jobs will double by 1980.

You have an inspired generation from which to pick your future employees. They seek with a fervor a world that's a healthier, more beautiful, more enjoyable place to live. Aren't the aims of your business efforts in line with that goal? Then take steps to tell them so.

Your industry is tailored to the younger generation. It's vigorous, rugged, challenging, creative. It requires the hardiness and enthusiasm of the young. The constant need for improvisation and innovation is worthy and welcomed exercise for the young, inquisitive mind.

Your industry is in excellent position to correct a situation that may be one of the strongest contributors to young people's disenchantment with business. They are educated to be individualists, then find themselves in a business world of conformity.

Throughout a young person's formal education, he is taught to think for himself, plow new ground, sow new seeds. Educators constantly boast of how much more youngsters are learning these days and how much earlier they are learning compared with older generations. But with degree in hand, they've discovered it is the old military game of "hurry up and wait" and "conform."

With heads bursting with principles, theories and enthusiasm, they're then de-energized by job classifications, union work quotas, pay categories, seniority rights, standard operating procedure, and, in some instances, just plain age discrimination.

Your industry incorporates so many work description variables that you have the chance to better your competitive position for labor by offering to shape the job to the man, rather than forcing the man to shape to the job.

It is interesting to speculate. If industry did as much to cultivate young people's energies and talents as it does to get their spendable income, would there be a segment of the younger generation shouting for the destruction of The Establishment?

Gene Ingalste

## If beautiful, weedless turf is a status symbol...so is BANVEL.<sup>®</sup>

It follows because Banvel is an elite product, a top quality product, an economical product  $(9\not e/1000 \text{ sq. ft.})$ . The product you can count on to do the important job of eliminating the commonest and toughest broadleaf weeds in a broad range of tolerant turf species.

Banvel 4-S, for instance. Developed specifically to kill "2,4-D tolerant" weeds like knotweed, chickweed, white clover, red sorrel, carpetweed, etc. The weeds that seem to survive other control methods...even rooting out by hand!

How does Banvel 4-S do it? *Translocation*. Banvel uses two avenues of attack; through the leaves and through the roots. By each avenue it then travels *throughout* the weed, no matter how deep-rooted, because it uses the weeds' circulating fluid systems to move into every living cell.

Although Banvel also kills many of the same broadleafs as 2,4-D, there are some against which it is not as effective. Banvel + 2,4-D, a completely compatible and water soluble Velsicol combination, provides broad spectrum control of this long list of turf-destroying weeds:

Dandelion, plantains, curly dock, chickweeds (common mouse-ear and perennial or stitchwort), dog fennel, knotweed, sheep sorrel, clover, knawel, chicory, henbit, ragweed, pigweed, burdock, poison oak, poison ivy, ground ivy (creeping charlie), wild garlic, wild onion, English daisy, spurge, purslane, pepperweed, lawn burweed, hawkweed, spurry and carpetweed.



#### CHLORDANE ... AMERICA'S LEADING TURF **INSECTICIDE FOR BUGS WITH BAD EATING HABITS**

Soil insecticides come and go but Chlordane goes on forever. The reasons are clear-cut. Chlordane kills most common insect pests of turf; also many harmful or annoying insects that live on the surface: white grubs, Japanese beetle larvae, mole crickets, wireworms, ticks, chiggers, cutworms, ants, mosquitoes, sod webworms (lawn moths), earwigs and many others.

Although Chlordane has long-lasting action, it does not magnify biologically. Residues have seldom been detected in foods, water, fish, or wildlife. When detected, they have been insignificant.

Chlordane can be applied with standard equipment, in either liquid or dry form. Exact rates and directions for application appear on package labels.

#### Bandane® pre-emergence crabgrass control, 15% granules. 2-1 liquid or dry fungicide. **PMA 10** phenylmercuric acetate liquid fungicide. non-mercurial wettable powder Thiram 75 fungicide. Thiram-PMA broad-spectrum wettable powder fungicide combination. Foamwet spray adjuvant. NEW FROM VELSICOL FOAMWET<sub>TM</sub> Air-Emulsion Spray System ... a new precision spray system that lets you see where you spray, minimizes drift, sharply reduces amount of material required. Get the details today. Check the coupon. VELSICOL CHEMICAL CORPORATION 341 E. Ohio Street Chicago, Illinois 60611 A subsidiary of Northwest Industries, Inc.

VELSICOL CHEMICAL CORPORATION **Turf Chemicals Department** 341 East Ohio Street Chicago, Illinois 60611

WTT-51

Send complete catalog along with list of Velsicol Turf Chemical Distributors. Send complete information on Foamwet Air-Emulsion Spray System.

State

Name

Course

Address

City

Zip

### OTHER VELSICOL TURF CHEMICALS AVAILABLE:

GENERAL SUPPORT from a wide range of interests is emerging from testimony concerning the two major pesticide bills at congressional committee hearings. The bills are S. 745 and H.R. 4152. But spokesmen from industry, professional associations, and some federal agencies state again and again that the benefit/ risk ratio regarding human health and welfare should be the determining factor for any action taken. Under Secretary J. Phil Campbell said USDA "strongly endorses" H.R. 4152, but urged careful attention to interpretation. "Primary consideration," he said, "should be given to the welfare and needs of people when weighing the public interest benefits and risks of using any given pesticide or in cancelling its use. To put the deleterious effects of pesticides on a few species of esthetically desirable birds ahead of the needs of people would be a perversion of human values." Donald Lerch, Jr., speaking for the United States Chamber of Commerce, said "a pesticide should not be banned unless its possible harmful effects on man and the environment are greater than its unique contributions to the improved production of needed food and fiber, to the improved health and comfort of people, and to improvements in our natural environment." The Chamber joined the National Agricultural Chemicals Association and the National Pest Control Association in objecting to the "use by permit only" classification for certain pesticides in the Senate bill. The bill just doesn't spell out clear enough how the permit program would be conducted, they say. Not enough information is given on who the approving consultants would be, what their qualifications are, or what pesticides would be in this category. Further, spokesmen said the execution of the program would be cumbersome to the extent of being unworkable. The Chamber gave support to NACA's alternative to subdivide the "for restricted use only" category into: (a) Those (pesticides) which may be applied only by a licensed or certified applicator because of acute toxicity considerations, and (b) Those which may be subjected to other regulatory restrictions because of a potential for substantial environmental damage.

FRENSBARE

AMERICAN ASSOCIATION OF NURSERYMEN has expressed support of H.R. 4152 "with certain modifications." These include: (1) Establishing a review committee to issue stop-sale orders on pesticides, rather than giving the power to one person, EPA head William Ruckelshaus; (2) That criteria are lacking for categorizing pesticides into general, restricted and permit-only classes and that such criteria be developed in public hearings and be specified in detail in the law; (3) That permits issued should not specify time of application, leaving the decision of the exact time of application to the user, within the limits specified in the permit; (4) That a farmer who has obtained a permit be allowed to supervise application of pesticides on his own crops by his own employees; and (5) That for permit-only pesticides, users would have recourse through law to cover losses resulting from mistakes by pest management consultants (who would advise and issue the permits).