

Your third step to healthier turf

3

Fall is the time to take it



If you're following the DuPont TERSAN 1-2-3 Disease Control Program, you've already got spring and summer turf diseases licked.

Now's the time to prevent fall diseases—take your third step to healthier turf, the application of TERSAN SP on tees, fairways and greens.

TERSAN SP gives superior control of Gray Snow Mold and Pythium. These diseases will be the major problem, depending on your area, during the fall and early winter months.

TERSAN SP, like the other DuPont TERSAN fungicides, is non-mercurial, low in human toxicity and has a large safety factor on turf.

Now is the time to take the third step in your DuPont Disease Control Program or, if you haven't been on it, it's the time to start. You'll find the TERSAN Program is highly effective, economical...and *complete*. Prevents or controls all major turf diseases on all common grasses all year long.

NOTE: Applications of DuPont TERSAN 1991 turf fungicide should be used in the late fall and early spring in areas where Fusarium Patch (Pink Snow Mold) is a problem.

Your golf course supplier has complete details on the program and a supply of TERSAN fungicides. Give him a call today.

With any chemical, follow labeling instructions and warnings carefully.



ACTIVE INGREDIENT:
Diflufenacil (1,4-dichloro-2,5-dimethylpyridine) 83%

INERT INGREDIENTS 17%

USDA Reg. No. 362-344 U.S. Pat. 3,765,564

Keep out of reach of children.
CAUTION! MAY IRRITATE EYES, NOSE, THROAT, AND SKIN.

Avoid breathing dust or spray mist.
Avoid contact with skin, eyes, and clothing.

GENERAL INFORMATION—DuPont "Tersan" SP Turf Fungicide is recommended for the treatment of turfgrasses for the control of snow mold (*Typhula*) and Pythium blight.

Do not re-use container; bury when empty. Do not graze or feed clippings from treated areas to livestock.

NET 3 LBS.

E. I. DU PONT DE NEMOURS & COMPANY (INC.)
INDUSTRIAL AND BIOCHEMICALS DEPT. WILMINGTON, DELAWARE



TERSAN[®] SP
TURF FUNGICIDE

WEEDS TREES and TURF®

Volume 11, No. 10 October, 1972

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Applicator Use Laws 8

A state-by-state breakdown of the application laws pertaining to professional applicators. This review is in two parts. If your not familiar with the laws in your state, keep this as a ready reference.

Power Saw Safety 11

This is the last of a series of three articles designed for the professional power saw user. Our topics covered included selection of a pro-grade saw, maintenance of your saw and safety to you the operator. Arborist Hank Harvey combines his experience and knowledge of tree work and power saws to present this informative safety article.

Grooming the Monster 12

It was the talk of the golf world during the exciting 54th PGA Championship. Superintendent Ted Woehrle of Oakland Hills Country Club, where the match was held, tells about the elaborate preparations necessary to make a course A-1 for a game. His ideas can be implemented on your course should have the opportunity to host a tournament.

Hydrilla In Iowa 14

It's official. Hydrilla has been found viable in Iowa by a 3M Company official. Here's a wrapup on this discovery and the findings by Robert D. Blackburn of the USDA research center in Fort Lauderdale, Fla.

Mature Tree Transplants 16

Golf superintendents were the first to benefit from the concept of instant shade. Now others are looking to tree transplants in landscape design with increasing acceptance. Ross Barnekow of American Tree & Landscaping Co. describes the advantages of mature tree transplants.

International Shade Tree Conference Report 18

Department of Defense Conservation Award 37

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The Cover

Come to the fair ... with banners streaming, colorful tents and equipment displays. This was the festive atmosphere captured by our camera for this month's cover. Those who attended the recent meeting of the International Shade Tree Conference, Inc. will recall the warm, sunny hospitality of Southern California and the excellent display facilities for this year's meeting.

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All Yours



FYLKING KENTUCKY BLUEGRASS

U.S. Plant Patent 2887

The ultimate in beautiful lawn turf when you insist on Fylking, the low-growing, ground-hugging, fine-textured grass. It produces an abundance of side shoots, and has a dense root system that strangles weeds and creates rich, green cushiony turf of unrivalled loveliness. More disease and drought resistant, Fylking has proven superior in years of international tests and actual use. It thrives cut at $\frac{3}{4}$ inch (even low as $\frac{1}{2}$ inch) making backyard putting greens practical. Ask for 0217® Brand Fylking Kentucky bluegrass lawn seed or sod at your local wholesale seed or sod distributor.

Another fine product of Jacklin
Seed Co., Inc.

Editorial

A Voice United

Organizations provide the life blood to individuals and businesses engaged in the same occupation. They have been popular since man began to diversify in his interest and goals.

Within the past decade or so, however, the trend among organizations has been to establish interior goals. Conventions and meetings have been held to perpetuate these interior goals in the form of reports on new discoveries of equipment, chemicals and the like, speeches by experts outside the industry to motivate the organization to accomplish a better job, and practical demonstrations by industry leaders to strengthen the industry's image among its members.


These interior goals have served a purpose and we believe they should be encouraged. But the climate of today's world is changing. Increased attention has been placed on environmental issues, the ecology, the examination of practices and procedures by congressional investigative subcommittees and the enactment of laws not always in the best interest of the organization. Thus, these outside influences can and do shape the interior goals of an organization.

What can be done? "Green Industry" organizations must consider with increasing attention exterior goals that promote and educate Americans outside the realm of the organization's members. Think for a moment about an organization to which you belong. Does it in its constitution, charter, by-laws or elsewhere contain an operational policy statement that fully describes the job functions of the various members? If it does, could this statement represent this segment of the industry and be used as testimony in the rigid questioning of a Senate hearing.

Furthermore, who outside of our immediate industry has heard of your particular organization? Our editorial for August charged that even the ubiquitous USDA neither sought the counsel nor the advice of most of the important organizations of our "Green Industry" in preparing the 1972 Yearbook of Agriculture.

Exterior goals needed by every organization include policy statements that define the activities of members by job description and function, and a broad public relations program to familiarize others with what is being done. Our organizations could take a tip from organized industry and labor who make it a practice to routinely keep outsiders in tune with practices, programs or union demands.

"Green Industry" organizations have the potential solutions to many of the problems confronting the U.S. today. All we need to do is organize our exterior goals.



Pennfine ...

Other
fine-leaved
ryegrass

These two fine-leaved perennial ryegrasses were cut with the same mower. The one on the right shows the fibrous "paint brush" top which is characteristic of ryegrasses. Pennfine, on the left, took a smooth, even cut because it was bred for softer, easier to cut fibers.

Pennfine: the clean-cut perennial ryegrass.

All the new fine-leaved perennial ryegrasses are beautiful. Until the mower comes along. That's the moment of truth for ryegrass. And Pennfine is the fine-leaved perennial ryegrass bred specifically for mowability. You can see the clean-cut look of Pennfine in the photo above. You'll see it in your turf, too.

Pennfine vs. other fine-leaved ryegrasses

Developed and released by Pennsylvania State University, Pennfine is the best of the fine-leaved perennial ryegrasses. That's

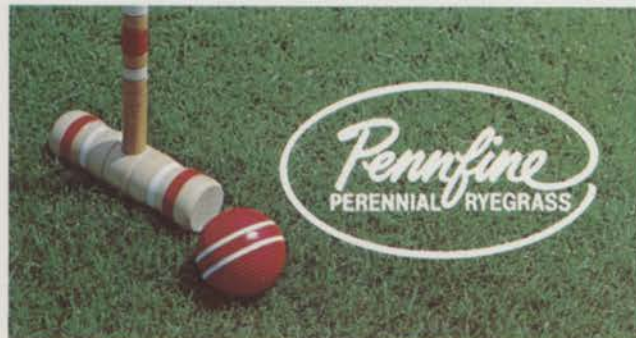
the finding of the trials at University Park, Pennsylvania. Among nine cultivars, Pennfine ranked first in texture, first in density, first in decumbency (low growth), first in tolerance to snowmold and leaf spot. And, of course, first in mowability.

Pennfine mows 'em down

The remarkable mowability of Pennfine — the result of breeding specifically for soft fibers — is demonstrated in the above photograph. It was also proven by the University Park trials. Over a five-year period, Pennfine

averaged 8.3 (of a possible 10) in mowability. The next best score was 7.3, and the other cultivars rated considerably lower.

With the finest blade of all the fine-leaved ryegrasses tested, Pennfine is beautiful to begin with. And, because of superior mowability, it stays beautiful. It's also highly compatible with Kentucky Bluegrass, both in terms of appearance and management requirements. If you'd like more information on this clean-cut perennial ryegrass, just send in the coupon.



TO: **Pennfine Perennial Ryegrass**
P.O. Box 923, Minneapolis, Minnesota 55440

Please send me technical information on Pennfine Perennial Ryegrass. Names of Distributors.

Name _____

Club or Company _____

Address _____

City _____ State _____ Zip _____



Government News / Business

Ackley Manufacturing Company, Clackamas, Ore. has been purchased by The Stanley Works, New Britain, Conn. Ackley will be operated as a wholly owned subsidiary.

The Ohio Agriculture department has filed charges against a tree surgeon for operating without a license. The charge stems from a complaint of a customer to the local newspaper consumer column about an unsatisfactory spraying job. When a reporter called the agriculture department, he was told the arborist did not have a license. The arborist admitted he had no license, but said no one else in the town of over 100,000 had one either. Conviction could bring a fine of up to \$200 on each count under the use and application act.

The flood of east coast recreational vehicles to the midwest and western states this year has brought good news and bad news to area residents. First the good news. Tourist trade boomed. Now the bad news. Gypsy moth invaded areas that heretofore were geographically immune to this marauder. Latest area to be hit is Iowa's Rock Creek State Park. Other first timers include Tennessee and West Virginia.

New Jersey joins a growing number of states to establish a department of environmental protection. Like others, this department grew out of the bureau of water pollution control -- some states have combined the commissions of air, water and natural resources into a department -- and now has the capability of dealing with the ever-growing problem of polluted rivers, streams and groundwater. Watch for increased activity at the state level from these new departments.

The Cost of Living Council has reversed an earlier ruling and has now exempt nursery stock from all price controls "after the first sale by the grower." American Association of Nurserymen President Kenneth J. Altorfer says that action by AAN was largely responsible for the reversed decision. The Council agreed with AAN that any individual firm might grow part of what it sells and buy a part, and it is neither practical nor useful to attempt to control only the price of the purchased portion. Thus, all sales of growing nursery stock are exempt from price controls.

Congressional leaders on the Labor Department Appropriations Bill have attached a rider that bars use of Federal funds to inspect establishments with fewer than 15 employees until June 30, 1973. The President has vetoed the bill and the House has upheld the veto. At presstime, the bill has been referred back to the House committee to refigure the proposed expenditures. It may be only a matter of time before the rider becomes law. If it does, there will probably be a grace period for most operators.

the Ditch Witch building-block concept begins with these versatile handlebar units.

Three compact Ditch Witch units provide a solid foundation for the Ditch Witch building-block concept of trenching! They're small and compact, yet they're fully self-propelled to deliver big-machine performance on the job. The 7- to 9-HP **C-Series** delivers the lowest cost-per-foot of trench of anything in its class . . . it's so compact it slips through any standard yard gate with ease—and one man can easily load it into compact van or pick-up.

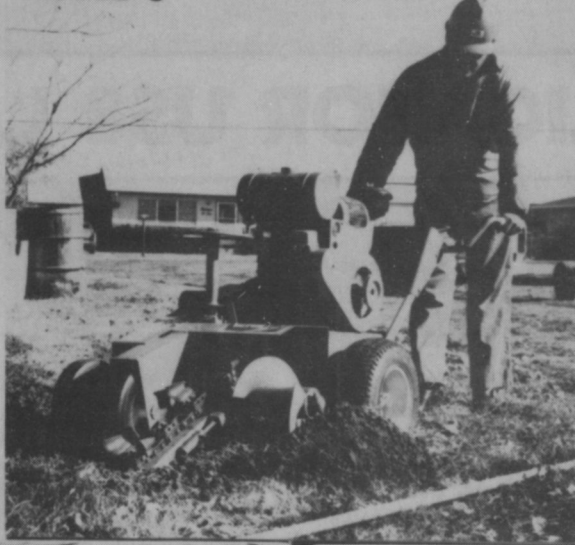
The **M-Series** offers 9- to 12½-HP, and is available in a track-mounted crawler model. With three digging speeds, plus reverse, it delivers as

many feet of trench per hour as bigger competitive models costing twice the price.

For utility service installations, you can't beat the **VP12 Vibratory Plow**, with 25-HP capabilities and full hydraulic control. Install service lines or sprinkler systems without trenching, without costly restoration to expensive turf.

Compact, rugged and economical — Ditch Witch handlebar units provide the solid foundation for your entire trenching operation. Let us tell you more about our full line . . . or ask your Ditch Witch man to give you a free demonstration!

MODEL C



MODEL M



MODEL VP 12



Build from the bottom by starting at the top...

TRENCHING VEHICLES FROM 7 - 65 HP . . . MODULAR ATTACHMENTS FOR EIGHT SEPARATE DIGGING FUNCTIONS

Charles Machine Works, Inc./P. O. Box 66/Perry, Oklahoma 73077





APPLICATOR USE LAWS

A SIGNIFICANT tightening of pesticide use and application laws nationwide has taken place since our last report. (See WTT, April 1970, p. 10). In an effort to create order from disorder, state legislative bodies have been busy passing bills that more specifically define the generalities of existing laws or amending existing laws to a point that a new statute is born.

While it may be noted that this tightening has put more teeth in state administrative programs, the general impression obtained in reviewing state laws is that the Federal Environmental Pesticide Control Bill when passed will contain all the muscle through which the teeth derive their power.

However, states have not been standing idly by waiting for Federal legislation to take place. Most state administrators realize that the Federal Bill is designed around the commercial licensed applicator. The mandate will dictate certain requirements with which all states will have to comply.

Thus, there has been a flurry of activity to license commercial applicators. Additionally, all but two states now have pesticide registration laws. Often referred to as "economic poison laws" or "insecticide, fungicide and rodenticide acts," these laws regulate the production and marketing of pesticides by requiring compliance with registration and labeling criteria prior to interstate or intrastate shipment.

In many cases, use and application laws for the contract applicator are divided into three groups. One requires the examination and licensing of persons engaged in applying pesticides; another regulates persons in professions; and a third would prohibit or restrict the use of certain pesticides.

It is interesting to note that this latter category has received increasing attention by state control groups.

Like the movie industry, these groups have determined that certain pesticides should have an "X" rating or "restrictive use" rating. Thirty states currently either restrict, or have the authority to restrict, the sale and use of certain designated pesticides.

At presstime, only 12 states have no pesticide use and application law regulating the custom application of pesticides. Part of these 12 have established a permit system or require applicators to register with the state. Thirty-eight states require custom applicators to obtain licenses.

This report was prepared with the aid of the Division of Pesticide Community Studies, Office of Pesticides Programs, Environmental Protection Agency. The following is a state-by-state breakdown on the use and application laws for commercial applicators:

ALABAMA

First use and application law became effective January 1, 1972. It requires examination and licensing of persons who engage in the business of custom application of pesticides. A surety bond must be furnished and the Commissioner of Agriculture and Industry is authorized to prescribe rules and regulations governing materials and methods of application, discarding of pesticides or pesticide containers, keeping of records and other regulations. The act exempts governmental bodies, structural pest control operators and certain other control activities related to premises.

ALASKA

Under the new Department of Environmental Conservation, authorization is provided to license persons "engaged in the custom commercial or contract spray-

ing or application of pesticides and broadcast chemicals including the requirement of a surety bond and liability insurance for the licensee." Application of banned agricultural chemicals is prohibited.

ARKANSAS

Although the Arkansas Agricultural Application Service Act does not specify qualifications for licensing, the state plant board administers the act and sets standards for qualifications and application. Of perhaps more relevance to the "Green Industry" is the Arkansas Pest Control Law. It regulates tree surgery, spraying shade trees and shrubs, and termite and other structural pest control. Additionally, the Economic Poison Act has special restrictive regulations regarding the use and application of hormone-type herbicides.

ARIZONA

To obtain a license in this state an applicant must satisfy the Board of Pesticide Control as to character, qualifications, responsibility and good faith. Exemptions to having a license include airplane pilots on a temporary basis during emergencies, application of fertilizers or seeds, governmental bodies, weed control on railroads, highways, canals, or utility easements. Violations to the Arizona Pesticide Use and Application Act, the law governing pesticide use, constitute a misdemeanor subject to a fine of not less than \$100, nor more than \$1,000, or imprisonment of not over 90 days, or both fine and imprisonment.

CALIFORNIA

Use laws are applicable for nearly every conceivable type of pesticide application. The California Agricultural Code specifies aircraft operation regulation, agricultural pest control agents and pesticide dealers are subject to the state ordinances. Applicators and dealers must pay \$50 yearly for a license; pilots are charged \$25 (renewal \$15); and, agents are not charged a fee. In each case, however, a written examination is required.

California Assembly Bill No. 327, approved October 5, 1971 amends the economic poison law by adding a new paragraph making it unlawful ". . . for any person to store, transport, handle, or dispose of any economic poison, or any container which holds or has held such economic poison, except in compliance with rules and regulations of the director . . ."

In another bill approved on October 19, 1971 the Agricultural Code was amended by making it unlawful to act or offer to act as an agricultural pest control adviser without being licensed or without having registered as prescribed. It also required that the permit to use any pesticide for agricultural use be obtained from the county agricultural commissioner. Further it made it unlawful to sell or deliver any "restricted material" without a permit.

COLORADO

Be prepared for both an oral and written examination to get an applicator's license in this state. However, exemptions include applicators of fertilizer and soil conditioners, persons applying pesticides on their own or controlled property, occasional applicators working on adjacent property and structural pest control operators. One interesting note is that your license may be restricted to certain types of equipment or materials. A reexamination is also required each year.

CONNECTICUT

All matters relating to the preservation and protection of the air, water and other natural resources of the state have been delegated to a Department of Environmental Protection. This includes the application of pesticides. Custom ground application of pesticides or application of pesticides or fertilizers by aircraft can be accomplished only by licensed applicators. Tree experts are covered under the Tree Expert Law which requires licensing of persons who contract to improve the conditions of trees (including spraying to control insects or diseases).

DELAWARE

While a license per se is still not required in this state, House Bill No. 35, approved June 25, 1971, adopts a uniform pesticide registration law. The act authorizes the secretary of the department of agriculture to prohibit the sale of a restricted use pesticide to any person other than the holder of a valid use permit. The use permits are limited to the area, time, amount and rate of application, and related factors. Thus, in a sense, the use permit serves as a license to the applicator.

FLORIDA

According to the Florida Pesticide Law, application of non-restricted pesticides may be accomplished without a license. But, it is unlawful to sell or purchase a "restricted pesticide" without a valid license or permit. Further, to use or dispose of a restricted pesticide, except in a manner authorized by the permit and according to label directions, is also prohibited. The Pest Control Act, administered by the Florida State Board of Health, relates to control of pests in structures, lawns, ornamentals and nonagricultural environments. It would be good to become familiar with this Act.

(continued on page 22)

California Law Further Explained

Walter Bray, president-elect of the California Landscape Contractors Association reports that the state legislature continues to pass legislation to make it more difficult for licensed operators to make a living as contractors.

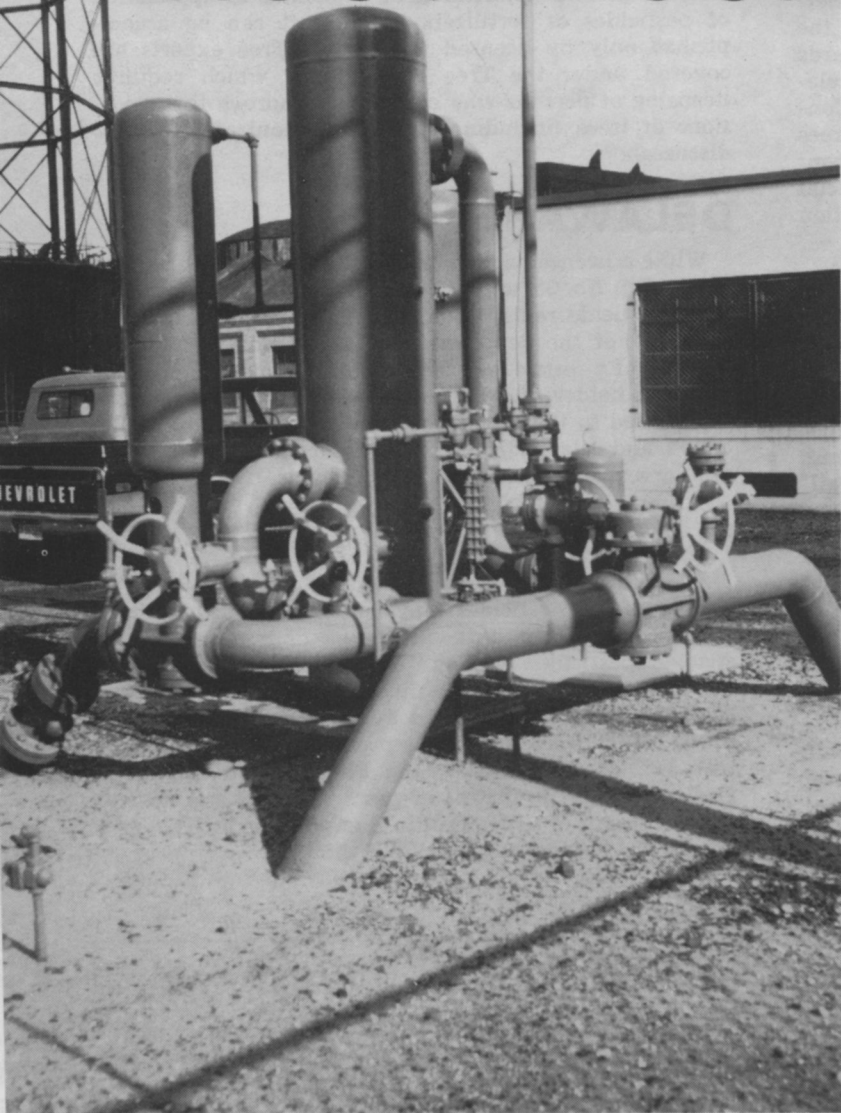
On July 1, 1973, license numbers will be required on all contracts, subcontracts, calls for bids, and various form of advertising. This bill was first introduced as SB-239. Governor Reagan has now signed the bill into law. It is incorporated into the Business and Professions Licensing Code as Section 7030.5.

The governor also has signed SB-1088 to pro-

hibit suppliers from selling their products or services to unlicensed operators. The crux of the legislation was to prevent the continued abuses by unlicensed individuals, who purchase their materials for illegal work at the same prices as legitimate contractors.

A third bill to become law 60 days after the legislature adjourns is SB-247. This Act will authorize stiffer penalties for unlicensed operators convicted for the second time of operating without a license. It will force district attorneys to take action against anyone who has prior conviction of operating without a license.

How to control weeds and costs at the same time.



In industrial applications, as shown here, Tandex controls weeds along fence lines, parking areas, ditches, pipelines, sidings, storage areas, tank farms, and sign posts.



Weeds are expensive.

They are everything from a fire hazard to a haven for unfriendly rodents.

They can corrode a fence line.

Make people sick.

Destroy the drainage efficiency of a railroad's right-of-way.

Millions of man-hours and thousands of machines are fighting the war against weeds.

A very expensive war.

Weeds hit some harder than others

The weed onslaught is particularly damaging to such operations as railroads, utilities, oil fields and highways, as well as general industry.

This message is especially addressed to operations like these—it is a message about Tandex®, the soil sterilant that can drastically cut the cost of weed control programs.

Tandex—what it is and what it does:

Tandex is a urea-carbamate compound that's demonstrated exceptional control over weeds, grasses, vines, brush and the hard-to-kill woody species.

Tandex does its weed-killing job by being absorbed through plant roots.

Once applied, Tandex can last a whole season, or longer. Yet it's relatively non-hazardous to man, animals or fish.

A distinct advantage of Tandex is its stability in the soil. Put another way, this means it has minimum lateral movement—which reduces the danger to nearby trees and shrubs you *don't* want to lose.

Tandex can be sprayed or applied in dry granular form. It can also be combined with other herbicides for special control situations.

For more information, write to Industrial Chemicals Dept., Niagara Chemical Division, FMC Corporation, Middleport, New York 14105.

Tandex®

Herbicide

It gets to the root of weed problems

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