This is not happening. And not because of foot-dragging by industry.

There are several reasons for the slowdown. These would include the increase in the number of agencies involved in the approval of new products and uses, the changing rules of what is desirable in a pesticide, and the fact that, while new materials can still be found within the various classes of chemicals, the prospects within each class have diminished greatly.

Further, several companies have dropped their research and development activities for various reasons. Others are taking a hard look at their research efforts in light of the skyrocketing costs, market potential, and prospects for successful introduction of new compounds. Analyzed against the backdrop of current emotional outpourings against the use of pesticides, the outlook for new products reaching the market in any great number is bleak. A trend is developing. Companies are looking to other lines not as subject to the type of harassment being felt within the agricultural chemical industry.

The Public View

There is no doubt that the public view of the role of pest control chemicals needs to be improved. Whether it can be done or not is the subject of much concern, both in and out of industry.

Complicating the picture is the fact that what was heretofore a scientific discussion has been thrust into the public arena where simple answers are expected. Regardless of their desirability, simple answers just are not possible in such technical fields. Nonetheless, proposals to ban gain much favor. And herein lies the real danger. The total public welfare may well be at stake. The health, nutrition, structures, and well being of society depends to a

great measure on the proper use of pest control chemicals.

The inaccuracies and exaggerations published about pesticides have raised a smokescreen which obscures the facts which also must be weighed — the benefits which each of us receives from the responsible use of pesticides.

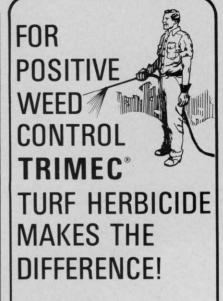
We can't ignore the problem areas, nor should we ignore the basic and overriding reason for the existence of pesticides, which is to protect the environment which supports us. Until each of use recognizes, in terms which we can understand, how much of our food, health and wellbeing stems directly from proper use of pesticides, we are in danger of losing these benefits as a result of panic-button reaction.

Whether the story can be told in time remains to be seen. Industry, of course, is accused of bias in attempting to point out the value of its products. But the user of pesticides knows of the great good they do for all consumers. He can do much to bring sanity and reason back into the picture by relaying his knowledge to his customers.

The irony of the situation is that without the benefits gained from pesticides — the food supply, the health programs, sanitation, the protection of our buildings, our surrounding lawns and shrubs, and the management of wildlife habitat — we would be forced into a return to primitive existence, and could illafford to focus our attention almost exclusively on the risks which their use may entail.

Some Other Views

THREE OTHER industry leaders generally agree with Mills' view on pesticides for the coming year.





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Perhaps the most publicized illustration of what can happen when one control method is banned before another is developed comes from the devastation of the gypsy moth. At left is an enlarged moth (normal size is ¾-inch) taken by USDA photographer Larry Rana. The moth is held captive in a holding device while his reaction to various lures is recorded. USDA scientists have developed a powerful synthetic lure, "Disparlure," that matches the female moth's attractant. The lure can be used in traps to capture the pest without the use of insecticides. Practical use of the method is months, perhaps years in the future. Meanwhile, the gypsy moth defoliated 800,000 acres of trees this year, triple the acreage last year.

They do see a few encouraging signs.

"Since a reported 200 bills are pending in Congress and many more proposals in state legislatures, I would expect the focus to be on new pesticide legislation and regulation," commented Bill La Rue, executive secretary of the Southeastern Agricultural Chemicals Association, Raleigh, N.C.

"I expect the pesticides which are more hazardous to handle and use will be the pesticides that will be somewhat restricted."

Leavitt S. White of Du Pont Company's public relations department believes that public confidence in crop protection chemicals, for example, will depend on "greater understanding by the public that these agents are thoroughly tested, properly regulated, and that there is an increasing awareness and desire on the part of the applicator to use these chemicals carefully.

"The need for crop protection has been highlighted in 1970 by the sudden appearance of corn blight," he said. "Growers everywhere face the challenges of weeds, plant disease, and insect infestation. Their problems and successes in meeting these problems safely with crop protection agents can be more widely understood in 1971."

It is not the users of chemicals that are in trouble, says Ray Thornton, president of Cane Air, Inc., Belle Rose, La., and president of the National Aerial Applications Association, "it is the average American. He has no conception of what this country would be like without pesticides.

"As for new restrictions, the sky is the limit. I will say that you will see DDT brought back. It will never be outlawed.

"I don't believe you will see many

new products on the market. The cost and red tape will be almost prohibitive.

"The pesticide industry can improve its image by circulating our story in magazines other than our own trade journals. We've been talking to ourselves too long.

"Should banning result of a needed pesticide due to inaccuracies and exaggerations, then the publisher should be held liable.

Users of pesticides should acquaint their customers with the true facts. A positive perspective is the best approach."

Meanwhile, formation of a type of national policy on pesticides is on the drawing board. While a broad general policy probably won't be fully defined for some time, a few guidelines are emerging.

An administration official hinted at these guidelines when he spoke to members of the National Pest Control Association at the group's recent annual meeting in Portland. Dr. William Murray of the President's Cabinet Committee on the Environment explained that current plans are to pursue a sharp reduction in application of persistent pesticides to essential uses.

In addition, a general policy might someday include a classification such as the following, he said: A category of pesticides intended for general use, subject only to label restrictions; a category of materials intended for restricted use where users themselves would have to be approved (possibly through licensing by a "properly recognized authority," and a third category of prescription-only pesticides. Materials in this classification would be available only to approved users, dispensed by written permission from an "approved consultant."



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Profit Growth Problems New Technology Legislation

Tree Industry Outlook

OPTIMISM AND

Chadwick



Nickel









Goodall

MY THOUGHTS relative to the shade and ornamental tree industry can best be summed up by two words — Optimism and concern.

The tendency toward an increase in population and urbanization, accompanied by demands for home construction, industrial development, highway construction, and for an improved quality environment will all bring about heavy demand for landscape plantings and aboricultural maintenance practices.

This is the optimistic side of the coin.

Our changing environment will bring about new concepts in city planning. The development of new "Town Centers" and the revitalization of existing downtown city areas will create a need for new tree cultivars to better tolerate environmental conditions and changes.

Development of buffer strips and roadside plantings to screen unsightly objects, deaden noises and enhance beauty; the development of close-in mini-parks; the requirements needed to improve air quality . . . all these will bring a greater demand for the selection and use of the right cultivar to "fit" the environmental demands of the area.

My concern? Will the industry be ready to furnish "the right trees"?

— DR. L. C. CHADWICK, landscape consultant and past executive secretary of the International Shade Tree Conference.

NEVER WAS THE OPPORTUNITY for profits better. Minimum wages in agriculture have put most nursery stock producers on more equal labor cost basis. Production supplies and maintenance materials, while steadily increasing in cost, are a reminder that the increases must constantly be considered in pricing plant material at both wholesale and retail levels. With

more equal labor costs, most producers should be able to price their product nearer its true worth.

Growth will be tremendous in industrial plantings, highway beautification, and domestic complexes, such as retirement villages, and even complete new cities.

Labor is, and will continue to be, our most important problem. Product prices in the future must allow us to upgrade the jobs we have to offer to attract more and better equipped personnel.

Many innovations will appear in both the growing and marketing of nursery plants in the near future. The container-grown plant is no longer an experiment, but for some climates has become a new way. Chemicals will no doubt show us undreamed ways of future growing or handling of stock.

How will legislation affect us? Even now there is much legislation that is law, or pending, that is of vital interest. Collective bargaining, pesticide use, and pollution of air and water are but a few. There will be more, and it will be our place to help our legislators in guiding this important action.

The American Association of Nurserymen theme of "Green Survival" should, and most probably will, be the guideline for good antipollution measures in the future.

The outlook for the nursery business was never brighter; it can be every bit as good as we nurserymen want to make it. —HAROLD R. NICKEL, Park Hill, Okla., Greenleaf Nursery Co., and president of the American Association of Nurserymen.

WITH TIGHT MONEY and the unemployment rate in New England, especially in Massachusetts, the profit picture will not improve in the near future.

We cannot continue to increase

CONCERN

our rates to offset the increase in cost of labor, equipment and materials. We must analyze our company, operate more efficiently, utilize equipment as much as possible, educate and train our employees to increase their knowledge, skills and productivity.

Professional tree-care companies have a bright future; the increasing concern in environmental controls should benefit us all.

The shorter work week, more leisure time and the growing interest in conservation means additional business.

Labor has been a chronic problem and will continue to be. Our industry must improve its public relations and its image. We must tell our prospective client and employee more about our profession. There are many opportunities and benefits for the qualified and interested man.

Disposal of wood and brush is a serious problem in our area. The time could come when an arborist might refuse a tree-removal because he cannot dispose of the brush.

New equipment that will dispose of wood will be developed. New methods for controlling insects and diseases will come. New chemicals to replace the insecticides banned will come. Research on Dutch Elm Disease will produce controls for the future.

Legislation that has curtailed dumps, restricted spraying and prohibited burning will continue to affect our business. —WILLIAM A. RAE, president, Frost & Higgins Co., Burlington, Mass., and president of the National Arborist Association.

THE TREE INDUSTRY, as in any business, is sensitive from a profit standpoint to the rise and fall of the economic market.

To stabilize the profit margin, most economists feel it is necessary

for businessmen to make every effort to cut operating costs, that labor achieve higher productivity and restrain wage increase demands, and that voters reduce the number of services they ask from government.

Our government has no magic wand it can wave to stop prices from rising. All of the above facets compete for and reflect in the profit picture we hope to obtain.

John R. Hansel, executive director of the Elm Research Institute, feels new technology will produce a breakthrough in combatting Dutch Elm Disease. This seems to be coming closest to reality in the field of repellants and attractants, especially in developing a reliable sex attractant. One university, using an E.R.I. grant, is cooperating with an eastern nursery hoping for an early breakthrough on a resistant elm tree.

The tree industry is relatively new. It has had major problems and will continue to have them. A few are the chestnut blight, DED, the Japanese beetle, gypsy moth saddle prominent, elm leaf beetle, and elm bark beetle.

Legislation restricting insecticides, and solid waste disposal will have definite impact on our business.

Despite the hazards, never in my more than 40 years in the treeservice field has the future looked brighter.

There are still fields to conquer in the battle to save our trees. Let's give them the starring part on the stage of life, as they grow along the corridors of time, building bridges of beauty and dignity between the past and the present. Lest we forget—It is not the community that graces trees, it is trees that grace communities.—GEORGE W. GOOD-ALL, chairman of the board, Goodall Tree Expert Co., Portland Maine, and president-elect of the American Society of Consulting Arborists.



Thousands of acres of woodlands suffered unsightly, if not fatal, injury this summer from swarms of the 17-year cicada. The female "locust" slit twigs and small branches to lay her eggs. Branch tips died leaving whole forests of green trees mottled with brown-tipped branches. Some smaller trees under heavy locust attack were killed.

Municipal Arborists Survey Reveals

MORE FUNDS FOR TREE CARE

DUTCH ELM DISEASE may yet be credited with a constructive contribution—that of calling public attention to the work of the municipal arborists, foresters, and park personnel.

A survey of 67 municipalities by the Society of Municipal Arborists reveals that tree removals are up sharply and that 70% of them are due to Dutch Elm Disease.

The resulting tone of their reports is that budgets have been increased, new equipment has been authorized or purchased, tree nurseries have been established, and new tree planting projects initiated.

Citing a significant increase in budget, Kenneth R. Neal of Elmhurst, Ill., believes it "indicates that thinking is with the field of arboriculture and minds are becoming aware of the need for maintenance of street trees and beautification."

The biggest budget increase—but for special reasons—was at Toledo, Ohio, where the capital improvements budget jumped from a half-million to \$9,065,000. Projects included clean-up of \$5 million in storm damage, the beginning of a 1,500-acre greenbelt development, and 100% expansion of office staff.

Total tree removals reported by the 67 communities were 87,618 during the fall of 1969 and spring of 1970. Total trees planted during the same period were 95,591. Some of the larger plantings and removals are listed in Fig. 1 and 2.

Removal reasons other than Dutch Elm Disease included other diseases, storm damage, dieback, general decline, street construction, vandalism and vehicle damage, new trees which did not survive, and salt, sewer and sidewalk trouble.

Aphids were reported as the prime insect problem in 18 communities. Other pests were fall cankerworm, caterpillars, leaf hoppers, gypsy moth, elm leaf beetle, red spider mites, bagworms, obscure scale, oak moth, mimosa webworm, oyster shell scale, and 17-year locust.

Diseases ranking after Dutch Elm Disease were cottony maple scale, maple decline, verticillium wilt, canker stain, oak leaf skeletonizer, fire blight, oak kernels, European elm scale, and oak chlorosis.

Aerial bucket lifts were the most frequently mentioned equipment item purchased in the past year. Others included tree spades, stumpers, chippers, trucks, log loaders, and sprayers.

Here is a sampling of achievements in past year that SMA members listed:

HARTFORD, CONN., Charles Meli and J. E. Allen — Participated in HUD's urban beautification program.

HIGHLAND PARK, ILL., David L. Kussow—Planted flower beds for downtown beautification.

RIVER FOREST, ILL., Michael W. Bearden—Inaugurated a public relations program.

MASON CITY, IA., Sterle E. Crandall — Ordinance passed allowing trees to be planted in downtown area.

WICHITA, KAN., John G. Firsching — Convinced community to go along with a planting program incorporating a wide variety of functional trees.

NEW ORLEANS, LA., August Catalano—Renovated Jackson and Lafayette squares; spent \$150,000 to replace equipment; increased tulip bulb plantings to 100,000; planted Sabal Palms in median strip of Canal St.; and landscaped Rivergate Exhibition Center.

DANVERS, MASS., James T. Printiss—Started a three-acre tree nursery.

BIRMINGHAM, MICH., Darrel C. Middlewood—Carried out tree-planting program in park land along river and resumed master street tree plan work.

MONROE, MICH., Julius Purvins — Started maintenance program, specifically watering and fertilizing trees.

MINNEAPOLIS, MINN., Dave De Voto—Annual budget increased from

\$450,000 to \$1,149,000; re-established board-owned nursery; imposed severe crackdown on and enforced inspection of construction work where trees are involved, in effort to prevent damage.

LINCOLN, NEB., Emilio L. Fontana—Developed tree nursery and planted trees on downtown streets.

OMAHA, NEB., Orville K. Hatcher—Planted six blocks of planter trees downtown.

NUTLEY, N.J., Peter Childs — Established municipal nursery; began master street tree plan; and increased budget 100%.

COLUMBUS, OHIO, Alex Wynstra, Jr.—Proposal has been made to utilize the front foot assessment program to finance the forestry program.

BURLINGTON, VT., Sid Baker— Started nursery on state land.

PORTSMOUTH, VA., Thomas O. Eaton — Installed landscape plantings, decorative signs, park fences, park benches, fountain and pool under \$70,480 Urban Beautification Grant; participated in planning for new \$80,000 project; initiated pilot project of container street trees; beautified land cleared in the downtown area by the city redevelopment and housing authority.

EAU CLAIRE, WIS., Fred Baumgartner — Began master street tree plan; planted flowering trees at park entrances.

MOOSE JAW, SASKATCHEWAN, CANADA, Andre R. Gate—Established minimum size for street tree planting at seven feet, began master street tree program; and used planter boxes on Main St.

WINNIPEG, CANADA, Martin E. Benum—Increased budgets for tree maintenance and planting; changed legislation to put teeth into the tree policy.

FIG. 1. Tree-Planting Projects 2,255 21,400 -Milwaukee, Wis. Richmond, Va. 6,714 Baltimore, Md. 1,731 New Orleans, La. 5,213 Toledo, Ohio 1,478 Dayton, Ohio 4,083 Rochester, N. Y. 1,343 -Pontiac, Mich. Portsmouth, Va. Minneapolis, Minn. 3,297 Cleveland, Ohio 1,272 3,141 Flint, Mich. 1,187 Aurora, Colo. Detroit, Mich. Philadelphia, Pa. Tonawanda, N. Y. Buffalo, N. Y. 2,567 1.084 -2,457 1,080 -Midland, Mich. 2,364 1,000 -

FIG. 2.	Tree-Removal Projects	
15,737 - Milwaukee, Wis.	2,228 - Flint,	Mich.
10,623 - Detroit, Mich.	2,043 - Cleve	
5,120 — Des Moines, Iowa	1,868 — Linco	In, Neb.
5,000 - Buffalo, N. Y.	1,641 — Toled	lo, Ohio
4,906 - Rochester, N. Y.	1,550 - New	Orleans, La.
3,500 — Topeka, Kans.	1,500 — Richn	nond, Va.
3,500 — Omaha, Neb.	1,473 — Phila	delphia, Pa.
3,250 — St. Louis, Mo.	1,375 — Akro	n, Ohio
2,983 — Dayton, Ohio	1,350 - Monr	nouth County, N. J.
2,790 — Wichita, Kans.	1,023 — Evan	ston, III.
2,708 — Baltimore, Md.		

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Awards were given in late October by Mrs. Walter J. Hickel, wife of the Secretary of Interior.

The nine award-winning projects were selected from 201 entries. Awards were given for outstanding landscaping contributing to environ-

mental improvement. They were selected from categories of commercial, industrial, institutional and municipal. The awards are believed to be the first given in the area of environmental improvement.

Harold R. Nickel, AAN president, presented 36 second-place certificates of merit to winners from 10 states and the District of Columbia. California accounted for 15 of these awards.





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Salsbury Laboratories, Charles City, Ia.

St. Bartholomew's Church Garden, New York City



UCLA Canyon Recreation Center, Los Angeles, Calif.

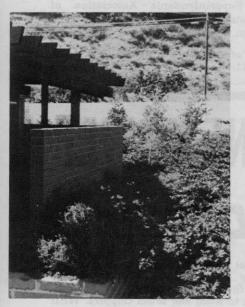




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State University of Albany, Albany, N.Y.



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meeting dates



Ohio Turfgrass Conference and Show at the Cincinnati Convention Center, Dec. 7-9.

25th Texas Turfgrass Conference, campus of Texas A&M University, College Station. Dec. 7-9.

National Aerial Applicators Association fourth annual conference at the International Hotel, Las Vegas, Nev. Dec. 7-10.

North Central Weed Control Conference 25th meeting, Phoenix Hotel, Lexington, Ky. Dec. 8-10.

5th Wisconsin Golf Turf Symposium at the Pfister Hotel, Milwaukee, Wis. Dec. 9-10.

81st Convention of the Western Association of Nurserymen at the Plaza Inn, 45th and Main Sts., Kansas City,

Indiana Arborist Association 23rd annual Midwinter Conference at Stouffer's Indianapolis Inn, 2820 N. Meridian. Jan. 5-7.

25th Northeastern Weed Science Society at Hotel Commodore, 42nd Street at Park and Lexington Avenues, New York City. Jan. 6-8.

Georgia Golf Course Superintendents Association annual meeting at Callaway Gardens, Pine Mountain. Jan. 10-12.

Mid-Atlantic Association of Golf Course Superintendents turf conference at the Holiday Inn, Howard and Lombard Sts., Baltimore, Md. Jan. 11-12, 1971.

Tennessee Turfgrass Association annual conference. Sheraton Hotel, Nashville, Tenn. Jan. 11 and 12.

New Jersey Recreation and Park Association 5th annual parks symposium. Lewis M. Herrman Labor Education Center, Rutgers University, New Brunswick, N. J.

University of Nebraska annual turf conference, Lincoln. Jan. 13-15.

23rd California Weed Conference, Woodlake Inn. Sacramento, Jan. 18-20.

Southern Weed Science Society 24th annual meeting at the Sheraton-Peabody Hotel, Memphis. Jan. 19-21.

Associated Landscape Contractors of America ninth annual meeting and trade exhibit at the Royal Orleans Hotel, New Orleans, Jan. 24-30.

41st Michigan Turfgrass Conference. Kellogg Center, Michigan State University, East Lansing. Jan. 26-27.

Pennsylvania-Delaware Chapter, International Shade Tree Conference, 6th annual Shade Tree Symposium. Memorial Hall, 44th and Parkside, Fairmount Park, Philadelphia, Jan. 27-28.

42nd Golf Course Superintendents Association of America International Turfgrass Conference and Show. Denver Hilton, Denver, Colo. Feb. 7-12.

Weed Science Society of America. Statler-Hilton Hotel, Dallas, Tex. Feb. 8-11.

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