



early years, he wanted to be a forest ranger. After eight years in the Marine Corps and two more learning to fly, though, he decided to stay on the commercial end of things. He spent four semesters in an Iowa landscape school. He didn't cotton to this angle as well as he thought he would. Immediately after graduation, he entered the tree profession by attaching himself to a line crew in Rockford, Illinois. Next, he joined an ex-Davey man in trimming trees.

"But he did so many things that seemed wrong," Badger Bill recalls. So Bill looked around. No arborist seemed to be doing ornamental work, as such. They were cutting deadwood out of trees and that seemed to be all. He chose to strike out on his own, and began developing what he considered the artistic way of trimming ornamental trees. As his proficiency grew, so did his business.

Through the years, however, one thing still bugged him: "Burr-r, I hate the cold." He disliked seeing his equipment bog down, laying his men off in November, and himself sitting idle all winter.

One day in 1959, as the snow drifted sill-deep to his office in Beloit, Wis. he hopped a jet to Phoenix. There, in the Valley of the Sun, he located his own particular kind of gold mine.

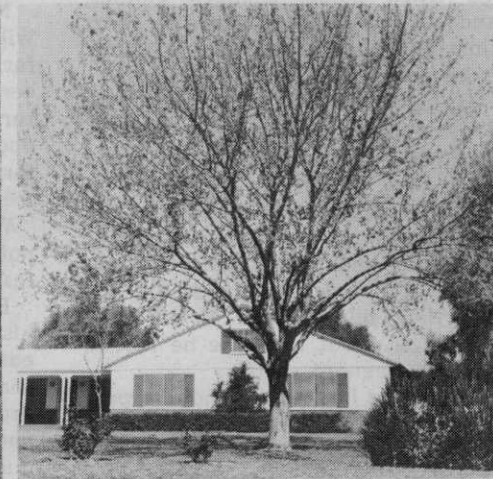
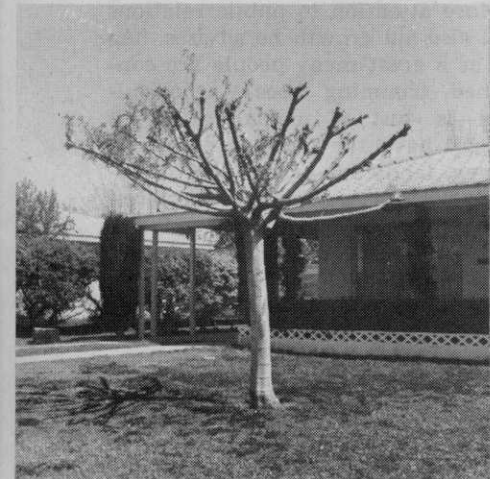
"Fantastic," he describes it. "From mountain to mountain you could see the word 'opportunity' To my amazement there were no arborists in Phoenix. No one knew what the Shade Tree Conference was. No one had heard of the National Arborist Association. No one seemed to know anything about arboriculture!"

He soon found, though, he had some ground work to do before he could stake his claim. Those leathery-cheeked Arizonians figured they had been doing pretty good so far. Who needed an arborist, what ever that was? Besides, they didn't trim olive trees; they didn't trim citrus trees; they didn't trim—

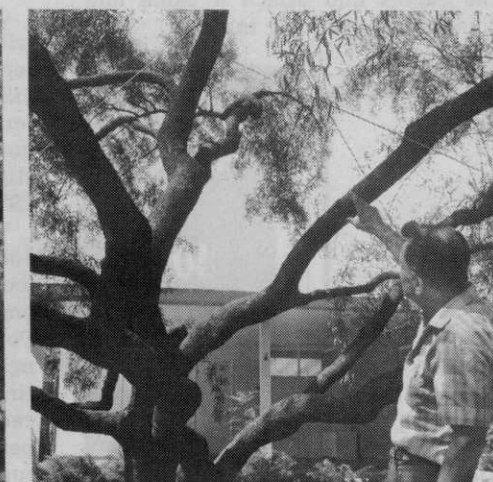
"Poppycock!" Bill interrupted. He flew home, brought back his family and part of his equipment, determined to prove himself.

The late Frank Wales, nurseryman, gave him his opportunity. He led Bill to a swarthy-headed giant. "We want you to trim this eucalyptus."

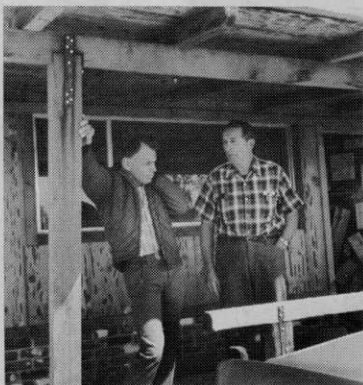
The eucalyptus was a new kind of critter to the Badger Bill. He squinted at the long rambling limbs, up the shaggy-barked trunk. "Is this the characteristic of the



"They just chop them off and end up with a green blob," Johnson says of many homeowners' pruning, pointing to the maple leaf mulberry. Another mulberry exhibits Johnson's trimming artistry.



Trees with a great deal of lateral branching are strengthened with cables. Johnson treats all wounds with tree dressing. You'd be surprised how much native trees respond to good care," he says.



Good care is emphasized for all equipment and employees, also. Employees have uniforms of levis, yellow T-shirts and yellow helmets. Equipment is kept nearly spotless. Johnson is talking with Carl Raw, spray division supervisor.

tree? Is this the way it normally grows?"

"Yes."

"Then that's all I have to know."

It took Johnson a day-and-a-half to do the job, but it proved the merits of his artistic concept. Wales promised if he chose to move the Badger Tree Service permanently to Phoenix, he would never be out of work.

Johnson made the move the following fall. He arrived in Phoenix with three old trucks (including a sprayer), and expected to have a little time to get his equipment in shape and family settled. But true to his promise, Wales already had more work lined up for the Badger Tree Service than it could handle.

Most of the new work, Johnson found, involved no more than he had been doing in Wisconsin. The names of the trees were different but the general techniques of good care remained the same. Except for one or two little things, that is.

Bill grins as he remembers the day he scaled his first palm tree. "It was a complete mystery to me. That winter I was here, one tree man had shown me how to scale one. But in the months I was back in Wisconsin I more or less forgot.

Lordy me! One day I got a job to scale some palms. I couldn't remember how they did it. I went deeper and deeper and deeper. I had a big shelf on it. I knew that wasn't right. I quit!"

He wasn't giving up though. As persevering as the furry little creature he'd chosen for his trademark before leaving Wisconsin, Bill drove his truck home, changed clothes, and got out the family car. A short time later he parked near a fellow palm scaler.

He sauntered over to the man. "Say, I'm from Wisconsin. It's interesting the things you are doing here. How do you do that?"

Unaware, his competitor gave him his much needed free lesson. Johnson drove back and finished his job.

Equally amusing to Johnson is the one they tell on him at arborists meetings, about the time he moved his first saguaro cactus.

Again, he had no idea how to proceed. So he and his helper put a four-foot ball around the six-foot prickly plant and burlapped it from top to taproot. Deciding he didn't dare put a strap around the soft flesh, he chose to nail boards around the cactus and attach a cable and finally managed the move.

Later, after joining the nurserymen's association, he related his prickly experience to his brother members. They roared with laughter. That's when Badger Bill learned the "B & B" method was totally unnecessary for saguaros or cacti of nearly any specie.

Today, the Badger Tree Service operates four trucks and has from five to eight employees.

New techniques in horticultural spraying have led the company to expansion in that direction. A recently created Spraying Division, headed by Carl Raw (another imported Midwestern arborist, from Ohio), is currently performing services in ornamental pest control, weed control and experimental growth retardants.

"There are many promising opportunities in horticultural spraying that should prove worthwhile in any part of the country," Johnson says. "Other tree service companies, hoping to increase their own business, should investigate this field."

More attention to public relations will also aid growth he advises. "As far as a great many people are concerned, trimming trees—arboriculture—is just a menial thing, it doesn't have the prestige of an attorney, landscape or building architect. This is wrong," he declares. "We're not just tree cutters. We're not just tree hackers. We're a profession to be proud of."

He stresses this idea first among his own men. Badger Tree Service employees report for work clean-shaven, with hair trimmed. They dress uniformly in blue clothing and yellow helmets. Courtesy is a must at all times.

Johnson's frequent press releases and garden club lectures are helping, he believes, in upgrading the image of arboriculture in Phoenix.

On the national level, he has contributed considerable time to the International Shade Tree Conference (ISTC), Western Shade Tree Conference (WSTC), and National Arborist Association (NAA). He investigated the Western Chapter of ISTC in Arizona.

With characteristic enthusiasm, Johnson is eyeing the future. "I'm looking forward to the day my second son, Tim, graduates from Cal Poly Tech and takes over the business," he says. "Then I'm hoping to find time to write a book on the care of Arizona shade trees, and perhaps start a school for arboricultural and horticultural maintenance. This way, maybe, I can see to it more people receive the quality service in tree care that they deserve."

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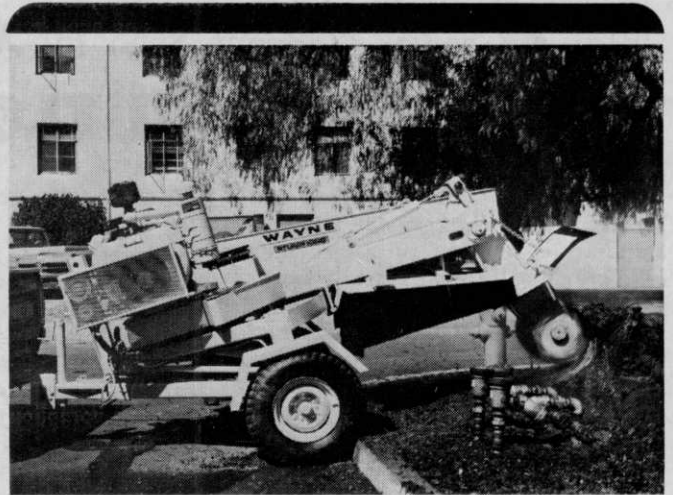
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'Interim Grower' Concept Seen by AAN Group

LANDSCAPE OUTLOOK

EDITOR'S NOTE: American Association of Nurserymen has a standing committee of seven men who are on call to periodically assess the future. The seven got together recently to talk about the future of the landscape industry, generally, among other subjects. The following article summarizes their opinions. Members of the committee are:

S. B. HUTTON, JR., past president of AAN and president of Conard-Pyle Co., West Grove, Pa., nationwide rose and nursery stock company.

C. EDWARD SCOFIELD, vice-president of RA-PID-GRO Corporation, national manufacturer of liquid fertilizer.

HAROLD R. NICKEL, AAN president and chairman of the board of Greenleaf Nursery Co., Muskogee, Okla.

JOSEPH H. KLUPENGER, AAN vice-president and president of Klupenger Nursery & Greenhouses in Portland, Ore.

JOSEPH A. ABRAHAMSON, sales representative for Mount Arbor Nurseries, Shenandoah, Ia., and Greenleaf Nursery Co., Park Hill, Okla.

LAWRENCE W. BACHMAN, secretary of Bachman's, Inc., landscape and retail firm in Minneapolis, Minn.

DR. RICHARD P. WHITE, executive vice-president of AAN.

ALMOST UNANIMOUSLY, an American Association of Nurseryman committee of prognosticators declares that a bright future can be seen for firms engaged in landscaping and landscape maintenance.

The increasing affluence of today's society has accelerated the trend away from "do-it-yourself" vogue of the 50s and early 60s. More people are making more money. In the 15-year-period of 1965-1980, about a 50% increase can be expected in both median family income expressed in constant dollars (\$7,000 — \$10,000) and in per capita disposable income (from \$2,400 — \$3,600). In the 1980s, one family in three will be earning \$15,000 a year, in dollars of 1966 buying power, compared with one family in 13 today. It is also estimated that by the year 2000, hourly wages will average \$7.50 per hour compared with \$2.82 at present.

Adding also to the rosy future for landscape is the increasing mobility and burgeoning population of the and burgeoning population.

Hutton: "As for landscaping, little need be said. With a continuing affluent society it can only boom in the foreseeable future. Its single real limitation may be in personnel able to execute it. I would expect to see attempts to build landscaping organizations with many regional branches, and I see no reason for this not to be successful. At the same time, I would expect the in-

dependent landscaper to be around for a long time."

Nickel: "The future is confused for the retail nurseryman or garden center operator. One bright hope is for the retailer to get into landscaping. Here he can successfully operate from a very economical location in the age of 'you do it for me' rather than the fast declining 'do-it-yourself' systems on which I believe the garden centers place too much emphasis."

The AAN staff agrees with the Committee in predicting a bright future for landscape. However, it believes that the "character" of today's typical landscape job may change somewhat. The strain of increasing population and prices may put home ownership beyond the reach of many young couples. Increasingly, in areas such as Boston-New York-Washington, Chicago-Pittsburgh and San Francisco-San Diego, apartment buildings and townhouse complexes can be seen sprouting in what were once considered "suburban" areas. This may create a demand for "limited" landscape jobs—container planted balconies, roof gardens, patios. Additionally, sales of mobile homes have been increasing (and their quality improving) for several years. A market calling for specialized landscape services may develop.

Klupenger: "I agree. Planters will be filled with dwarf or low-growing plants which can be cared for with ease. In the western and southwestern parts of the country, we are already beginning to find more of the mobile parks which are becoming very popular for those who voluntarily move or those who are transferred from city to city."

AAN Staff: "One retailer in the Washington area during a recent survey of his customers, was surprised to find that 6.7% of his customers were apartment dwellers. He stated, 'In comparison with homeowners, it may not be much of a market, but then we have an awful lot of apartment balconies in the Washington area that could do with some containerized plants.'"

Bachman: "One thing we do not want to overlook is that this increasing demand for landscape services has created and will continue to create serious shortages in plant material. I see this as a trend, and in

our area some interesting things are occurring . . ."

Nickel: "I agree. There is going to be a tremendous shortage of nursery stock, not only in shade trees, but in all lines within the next three years. The lined-out material which should be in now to meet this demand is just not there, and at this date we couldn't avoid this shortage because there is just not enough time to grow it."

Scofield: "At RA-PID-GRO we are experiencing a surge of interest in maintenance. It all points out that there is a vast consumer market which is very substantial and very solid. We're getting many inquiries from golf courses, factories and commercial people who occupy the beautiful new buildings under construction. It's very exciting."

Bachman: "What I think is very exciting is that the people who use our plant material are becoming increasingly aware of this shortage. In our area, this uncertain supply has caused landscape architects, developers and others to plan ahead. These people are now coming to us with their needs blocked out two and three years in advance.

At present, a combine of seven golf courses has a three-year contract with us, wherein we agreed to furnish and install their specific shade tree requirements. They've furnished us with a list of their anticipated needs and we have set aside a block in our own production for them. But here's the difference from a wholesale grower contract: we have agreed to step out and buy the materials we don't presently have with a guarantee to them that this merchandise will be available when they need it. In some cases we've gone to wholesale growers and placed deposits to hold material for three years hence deliver.

Our deal with this combine is that they get a 10% discount from the current price of the materials in return for a 25% down payment. We believe there is an advantage because there are no future sales costs to contend with, and we have a fourth of the money to work with right away."

Nickel: "Larry, I don't think this trend will be too successful because growers are not going to be willing to take a price now for something projected three years in the future. I'd prefer to make my market now rather than be committed three years away."

Bachman: "Well, we weren't going to try to project prices three years from now. But, I don't think you'd hesitate to do it on this basis

at all. If you had one quarter of my money right now, I think it would be worth an 8 or 10% discount to you."

Abrahamson: "Harold, you're also talking about an entirely different set-up. Your business is to ship smaller plants long distance, while Larry is delivering and installing large material on a local basis."

Nickel: "That's true. We may be seeing an entirely new concept of growing—an 'interim grower' firm, where the supply would run from wholesaler to interim grower to contract. This might be a new type of distribution."

AAN Staff: "And a new type of business. Suppose wholesale growers continue to specialize, and instead of shipping all over the country, they ship to 5 or 6 'interim growers' who assemble the entire range of plant material suitable for an area. These 'interim growers' would grow the material on into larger sizes, and would be geared to efficient distribution and possibly installation. Orders could be taken from small retailers for delivery almost on a 24- or 48-hour notice for delivery. Future contracts and guaranteed supply would also be part of the set-up."

Hutton: "I think installation would also have to be part of the package — the capacity to take the material a customer has reserved and put it where he wants it."

Scotfield: "Would maintenance contracts also be a part of it?"

Bachman: "Probably not. This would be separate because most of these big customers — golf courses, large industrial plants, etc., have their own maintenance set-ups. Maintenance is not a big factor, but installation is."

Nickel: "We have long known that a need for large material exists. We can grow it, but we can't ship it. This kind of development might begin to help the situation."

Specialization and service are watchwords for the future marketing of plant material. One large firm in the Northeast is capitalizing on the increasing trend of the use of landscape size plant material in interior plantings. This firm reports that over one-half of its annual sales volume is from the "specialized" use of plant material in "interior landscaping." Formed in 1957, the firm reports that its sales have been doubling every three years.

Working closely with landscape architects, architects, and interior designers, the business supplies complete installation and continuing maintenance service for interior landscaping.

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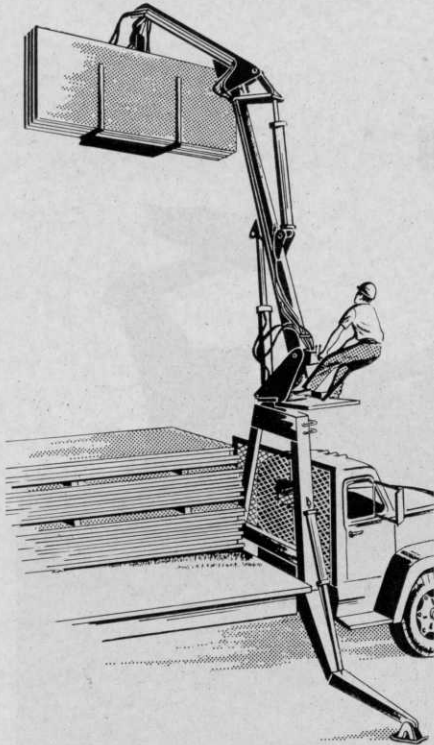


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Warren's Turf Seeking Franchises



Ben Warren, Warren's Turf Nurseries, explains testing procedures to visitors at the turf nursery's research center near Palos Park, Ill.

Warren's Turf Nurseries, Palos Park, Ill., considered the world's largest turf grower, is pushing franchise grower operations.

The Warren brothers, Bob and Ben, plan to establish associate franchise growers in all worthwhile market areas of the U.S. where Warrens have no operation of their own.

Already, franchise growers have been licensed in Maryland, Missouri, Kansas, Minnesota, Idaho and Nebraska.

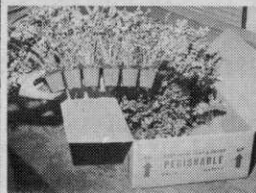
At the heart of the franchise operation are the three grasses developed by Warrens Turf Nurseries—A-34, A-10, and A-20. All have certain recognized advantages over other bluegrasses.

Ben Warren developed A-34 from a grass he found on a golf course thriving in areas under 65% to 70% shade. It blends well with other varieties and also does well in sunny areas. Warren found two other grasses about the same time, designating them A-10 and A-20.

A fine-bladed grass with a deep green color, A-10 takes heat and humidity exceptionally well, having survived in such hot humid areas as St. Louis, South Carolina, Newport News, Va., and elsewhere. It has promise for southern states where its edge over bermudagrasses is retention of its deep green color all year round.

A-20 is considered by many to be Warren's best discovery. It greens up earlier in the spring and in the cold areas of the north stays green

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longer in the fall. In southern areas, it retains beauty the year around. It is a little darker than Merion in color, its leaves are slightly more narrow than Merion and have an upright growth characteristic. A-20 does well at almost any mowing height from 3/8-inch to two inches. Of particular interest to sod growers, it promises to be a money maker because when sod of A-20 is stripped from the growing fields, it grows back from the rhizomes extremely fast. Several of Warren's branch nursery managers report producing two crops of A-20 in the same growing season.

Both A-20 and A-10 must be planted vegetatively with plugs. The plants that develop from seed do not carry on the fine characteristics of the parent plants. Machines capable of planting up to 10 acres per day are in use and can be rented from Warren's.

All three of the Warren grasses are rated high in resistance to turf diseases. An additional note of interest was reported recently from one franchise grower who said that the only grass in his area that sod web worms would not eat was A-20.

Warren plans no expansion into Canada, stating that the reason is Canada's failure to provide plant protection patents. Bob Warren expressed interest in an English market, citing the amount of population in such a small area and the Englishmen's love of a beautiful lawn. An Italian nurseryman approached Warren's recently and plans to establish a turf operation in Northern Italy.

Cal-Turf Introduces A New Turf Colorant

A new turf dye has been introduced by Cal-Turf, Inc., Camarillo, Calif., for use on all dormant turf including Bermudas, St. Augustine and Zoysias.

Called Cal-Verde, the dye was developed by Cal-Turf researchers to provide lush green turf color in a long-lasting, easily applied form.

Once dry, Cal-Verde will not stain clothing or shoes, and one application normally lasts a full season. The new product is also excellent for dressing up growing turf, such as for shows, grand openings, etc., according to Paul Ledig, Cal-Turf Sales Manager. In these applications it is used half-strength.

Cal-Verde is sold in one quart cans (one quart covers 1,000 square feet). For more information, circle (721) on the reader service card.

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EDITOR'S NOTE: Members of the Pacific Northwest Pesticide Applicators Association have filed a petition for review of the federal government's latest restriction on DDT — barring use on ornamentals. Jennings P. Felix & Associates has been retained. The petition was filed Sept. 30 in the name of Crop King Company, a registrant for DDT. At the annual conference in early September, unanimous approval was given for a total-member assessment to finance the necessary litigation. Now PNPA president George M. Harrison has written an open letter seeking other industry support.

TO WHOM IT MUST CONCERN:

We are members of the Pacific Northwest Pesticide Applicators, Inc., whose purpose is 1) to improve the standards of pesticide application and to bring together members of the insect, disease and weed control industries and allied horticultural and agricultural trades, 2) to promote goodwill, safe and ethical practices among the members and to create acceptance and confidence among the general public toward

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members of this association, 3) to promote discussion and interchange of ideas among members of all knowledge and experience that may be helpful in raising standards and maintaining these high standards of pesticide application.

We are the only regional organization of our type in the United States. That is why we feel that we must challenge the governmental decisions imposed on our industry, upon allied industries and upon the public by the almost complete banning of DDT. As you must be aware, DDT was only the beginning. Already a good portion of the

other chlorinated hydrocarbons are being challenged. Aldrin, Dieldrin, Chlordane, Heptachlor, Endrin, Lindane and BHC are now being judged. Judged we fear, not by scientific evaluation, but by a pressure group composed of some self-styled ecologists, misinformed politicians, and a news media concerned mostly with headlines.

We have petitioned the Federal and State Governments for a review on the uses of DDT and to do this, have expended most of the money in our treasury. We are looking for help from you and anyone who is concerned about the damage to the agri-business that is taking place with the banning of DDT, other chlorinated hydrocarbons, and to our chemical controls in general.

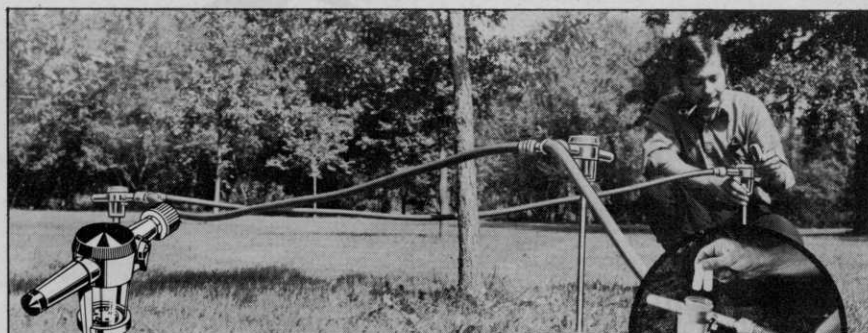
CAUSE is a special movement within our organization devoted to the continuing fight against ignorance and hysteria regarding pesticides and their use.

To promote CAUSE and implement it, we have hired a law firm and scientific advisers. This understandably entails a large outlay of cash. CAUSE needs your help: 1) Join our association. 2) Help with your donations to defray expenses.

You must feel the same as we do about this problem. You can see the havoc that will be created in the ability to control disease and insects, not only in the field of agriculture, but also in health, hygienic and structural areas; act now to help us with our cause. This trend of rash restrictions must be curbed long enough for science and reasonable action to prevail.

Please fill in the mailer and send along comments or suggestions. We need the help of all concerned industry and sound thinking people.

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'Legal Era' of Pesticides Sorry State of Morale Pre-Emergence Crabgrass Herbicides

OHIO TURFGRASS



BRUSH UP on your knowledge about courts of law, the keynoter of the Ohio Turfgrass Conference advised those who handle pesticides.

"This last year has seen a proliferation of legal proceedings of all shapes and sizes, and in quantity greatly exceeding the total of all the prior years of regulation put together," stated Bernard H. Lorant, pesticide consultant and former vice-president of research and development for Velsicol Chemical Corporation.

"We have entered a new, in some respects, ominous, but perhaps necessary era in the consideration of pesticides. I call it the legal era; the era when scientific questions will be settled by formal, adversary proceedings in the courts, or in quasi-judicial arenas. More frequently, questions of efficacy and safety for pesticides will be decided by lay judges.

"That the pendulum will swing too far on the ecology side, to the detriment of all, seems likely."

The pesticide industry will continue indefinitely, however, predicted Lorant, because pesticides are required. He defined two doctrines that he believes will shape the industry. The "essentiality" doctrine is the concept that a pesticide will not be used unless its use is essential and there is no safer pesticide that can substitute for it. The "preemption" doctrine—or rather the lack of it—is seriously affecting pesticide progress, he said. The proliferation of diversity of state legislation regarding pesticide application, efficacy and safety standards, and licensing is rapidly making the cost

of marketing new products prohibitive.

While Lorant's remarks gave cause for pessimism, Dr. Herb Cole, Jr., Penn State University pathologist confessed that "nothing disturbs me more than the sorry state of morale regarding pesticides."

"It greatly grieves me that the issue has become polarized. Somewhere in the middle we should be moving."

Recognition of some simple truths should help establish in the public mind a place for pesticides in the whole scheme of things, he said, among them:

—Pesticides should not be regarded as a pollutant along with other sources. Pollution from industry, he contended, comes from products that have no use to man.

—Pesticide food residue hazards? Very little is known about the hazards to human health from "nature's foods." Spinach causes kidney stones in frogs and and turnips can bring on thyroid problems, he illustrated.

—While the balance of nature may keep pests and pathogens in check, the swing of the pendulum is pretty harsh. "John F. Kennedy became president of the U.S. because of the balance of nature," he claimed, citing as the basis the rampage of the Irish potato blight that caused the starvation of 2½ million Irishmen and the emigration of thousands of others, including the Kennedys, and subsequent settlement in the U.S.

—Pesticides are not uniquely hazardous because large doses are

harmful. "All materials are toxic if the amount is large enough," he reminded.

—Monoculture is asking for trouble—witness corn and southern leaf blight, Merion bluegrass and striped smut, and the American Elm and Dutch elm disease.

Also with consternation, Dr. Cole exclaimed: "Why have we as landscaping and turf specialists fought against becoming professional? Concerning licensing examinations and standards, we have defended to the death the right of every nincompoop to use anything he wants."

Harold L. Porter, chief of Plant Industry, State Department of Agriculture, explained the provisions of Ohio's new Pesticide Use and Applicator Act. Commercial pesticide applicators will be licensed in the classifications in which they demonstrate their competence through examination. They can elect to take examinations in as many as nine categories.

Among technical papers presented, Robert W. Miller, Extension agronomist reported on testing of pre-emergence herbicides for effectiveness against crabgrass.

While several materials gave 90% to 100% control, they were less effective in controlling silver crabgrass, he said.

Herbicides tested were Bandane, Balan, Betasan, Arsenate, Dacthal, Tupersan, and Azak. All gave excellent control of crabgrass and foxtail except Arsenate which gave erratic results on all annual grasses but poa annua in the test. The herbicides gave fair to good control on