

## Midwest State Officials Search for Amur

Recent findings of amur (grass carp) in Minnesota and Wisconsin have officials of those states nervously searching ponds and lakes and streams, trying to keep the species from proliferating.

Officials of those two states say they have found that while amurs feast on vegetation in weed-choked lakes, weed beds are only controlled with dense populations of the

fish. Officials also said the amurs preferably feed on insects.

The destruction of rooted vegetation by amurs, Minnesota biologists say, will result in prolific algae blooms because the inefficient digestive systems of the amur passes partly digested plant matter into the water, thereby enhancing algae growth. And when algae takes over a pond, its demand for oxygen

results in summer and winter kills of fish, Jim Dudas reported in the *Cleveland Press*.

"Arkansas has experimented with the amur extensively," according to Tom Wasson, fisheries biologist of the Ohio Wildlife Division. "But we don't know how they will react to this climate and until there has been extensive research by the U.S. Fish and Wildlife Service we feel they could be a problem." He said the maximum penalty in Ohio for possessing or importing amur is \$200 per fish.

## Control Program Developed For Highway Landscape Pests

An integrated control program for highway landscape pests is under development in California. Among the pests in the landscape system are stem-feeding aphids. Formerly, the shrubs were treated with organophosphate insecticides to control early outbreaks of these aphids.

This treatment, while effective in temporarily suppressing the aphid populations, kills parasitoids and predators of both the aphid species and the red-humped caterpillar, another important pest in the highway landscape. Soap sprays have been a traditional means of aphid suppression for over 100 years and are considerably less toxic to insects than organophosphate insecticides. This it seemed possible a dilute soap spray could provide the required suppression of the aphids and probably cause less mortality among the parasitoids and predators than would the newer insecticides, thus permitting more effective long-term biological control.

A specially formulated soap spray was effective for removal of the aphids on highway plantings in California. Water alone produced a removal rate of close to 50 percent, and a general pattern of increased removal rate with higher concentrations of the soap solution was noted. The maximum soap concentration tested, 0.1 percent, produced removal rates of up to 79 percent. The work was reported in the *Journal of Economic Entomology* and excerpted in the *Journal of Arboriculture*. The work was done by Dudley Pinnock, Richard Brand, James Milstead and Nancy Coe.



New officers of the Pennsylvania Turfgrass Council recently elected are (seated) Dr. Fred V. Grau; (standing, from left), C. William Black, superintendent at Fountain Head Country Club, Hagerstown, Md., vice president; Arthur D. Wick, Lakeshore Equipment & Supply, Sewickley, Pa., president; and David M. Boyd Jr., D. M. Boyd Co., New Wilmington, Pa., treasurer.



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This 180,000-square-foot multiple occupancy warehouse in Imeson International Industrial Park, Jacksonville recently received the Florida Nurserymen and Growers Award of Excellence. The landscape design using grassed mounds and berms as well as mature trees indigenous to north Florida was created by Michael A. Gilkey of Hartwig & Associates, Jacksonville.

## Hyacinth Control Society Changes Organization Name

The Hyacinth Control Society has changed its name to The Aquatic Plant Management Society, which its members believe better reflects the thrust of the organization.

The change was decided at the organization's recent annual meeting in San Antonio, Texas, and the new title indicates the broad interests of the society membership. Ray A. Spirnock, of the central and southern Florida flood control district in Lakeworth, is the new president.

## Horticulture Legally Part Of Agriculture, Exec Says

Over the past decades, the nursery industry has been involved in numerous battles to defend its rightful place as a part of the broad concept of agriculture in federal, state and local statutes.

"For the past 38 years," explained American Association of Nurserymen executive vice president Robert F. Lederer, "the AAN has led the battle to retain the legal status of horticulture as part of agri-

culture. And over those years we have won many significant victories. The most recent and one of the most important was in the energy field where horticulture retains its position in the agricultural priority for fuel.

"Unfortunately, the battle is a constant one. The subject continually arises in all sorts of federal, state and local legislation. For this reason, we have had our attorneys prepare a catalog of AAN victories in this area to help others in the nursery industry defend its position as part of agriculture," Lederer said.

The *AAN Special Summary on Legal Status of Horticulture* reviews the status of horticulture under the principle federal statutes — wage/hour, labor, tax, OSHA, social security, energy and interstate commerce — and covers the major state statutes in general.

"When involved in questions of definition for the purposes of state and local legislation it has often proven useful to be able to present to a legislature, court or administrative agency a review of the treatment of horticulture in other areas of the law," Lederer said. "That is the purpose of this summary."





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## Toro Expands to Australia

Toro Australia Pty. Limited, a wholly owned subsidiary of Toro Company, Minneapolis, has been incorporated in New South Wales, David T. McLaughlin, Toro president, told WEEDS, TREES & TURF.

He said the new subsidiary has been formed to distribute the company's irrigation equipment throughout Australia.

## Determining Insurance Claim For a Bark-Injured Tree

When a car or piece of construction equipment skins a big hunk of bark from a client's tree, how does a consulting arborist determine an equitable claim against the insurance company? Here is how Bill Porter, a member of the American Society of Consulting Arborists from Rumson, N.J., does it for quick payment to his clients, as reported in a recent newsletter.

First, he lists the charge to the injured party for cleaning up the tree wound and making of necessary bark tracing. Second, he determines how many years it may take for the wounded area to close over and charges for an annual inspection during that period when he may have to dress up the area if die-back occurs around the edges.

Third, he makes an application of fertilizer at the time of the first visit and figures on one on an annual basis until the wound heals and figures the cost of these applications. The total is his figure which goes to the insurance company. So far he has had excellent results in insurance payments to his clients.

## Du Pont Profit and Sales Surged in Fourth Period

Du Pont Company, Wilmington, Del., reported fourth quarter net income surged to \$141 million, or \$2.87 a share, from the depressed year-earlier \$35 million, or 67 cents a share. Sales increased 20 percent to \$1.96 billion from \$1.63 billion.

That brought net for all last year to \$272 million, down 34 percent from 1974's \$404 million. Sales rose five percent to \$7.22 billion from \$6.91 billion, reflecting higher

average selling prices last year. But physical volume of shipments fell nine percent last year, it was reported in the *Wall Street Journal*. Irving S. Shapiro, chairman, said the company's agricultural chemicals performed "consistently well" last year.

## California Turfgrass Council Elects Sandhu President

G. S. Sandhu of Orinda Country Club has been installed as president of the Northern California Turfgrass Council during the group's annual awards banquet.

Also named to serve with Sandhu were Phil Wyatt, Sprinkler Irrigation Specialists, first vice president; John Deming, Ewing Irrigation Products, second vice president; and Rich Harrison, City of Alameda, secretary/treasurer.

Board of directors selected are: Don Lancaster, University of California cooperative extension, Hayward; Jack Mahshi, landscape architect of Berkeley; George Henrichs, landscape contractor of San Jose; Tom Churchill, Bay Irrigation and Turf Supply; Bruce Watson, Rain Bird; and Grady Simril, East Bay Regional Parks Department.



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## Ohio Reclamation Symposium Is August 9-12 in Wooster

Interest in returning disturbed lands to productivity has intensified recently as more lands are being disrupted in the search for energy. In light of this interest, a group of scientific organizations has organized a symposium on "Reclamation of Drastically Disturbed Lands" which will bring together experts from several disciplines to summarize what is known about reclamation and to identify areas where more information is needed.

The symposium will be held at the Ohio Agricultural Research and Development Center in Wooster, Ohio August 9-12. It is being sponsored by the American Society of Agronomy, Crop Science Society of America, Soil Science Society of America, Society of American Foresters, Soil Conservation Society of America, the U.S. Environmental Protection Agency and other organizations.

For further information, contact: Dr. Paul Sutton, Ohio Agricultural Research and Development Center, Route 6, Caldwell, Ohio 43724.

## Researchers Urged to Work With Nursery Businessman

One of the most serious problems in the nursery industry is the lack of communication between the research scientist and the nursery businessman, according to Robert F. Lederer, executive vice president of the American Association of Nurserymen. His remarks were before the Symposium on Better Trees for Metropolitan Landscapes, held in Washington, D.C. recently.

"All of the nursery businessmen I know need the results of the efforts of all of the research scientists I know," Lederer said. "In order to be properly oriented, research scientists need the opinion of the nursery businessmen. But how often do the two get together? When researchers come up with results, often they are held back waiting for publication in a scientific journal where credits as a scientist can be made. Often, good useable results

never arrive at that point where they can be put into operation, because people who can use them are not those who read scientific journals.

"When you develop your research program," Lederer told researchers, "keep very much in mind that your inclination may be to develop projects that are of most interest to you. Overcome that inclination. Base your projects on what will be of most practical value to producing better products, better

chemicals, better plants for our customer.

"I ask you, why work in a vacuum?" he said. "If your goal is to develop a fine Norway maple, the place to start may very well be by asking the municipal arborist or forester or all of our northern growers to share with you the best Norway maple they know of. He can take you to it right away — he has been watching it for years, but nobody ever asked him about it."

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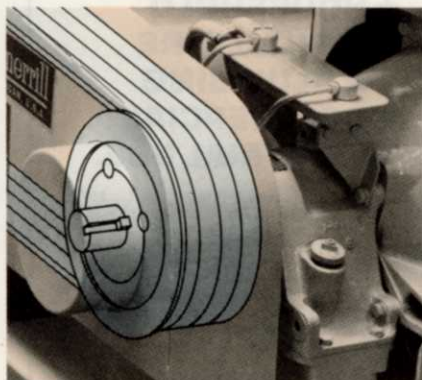


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## Report Discusses Managing Power Line Vegetation

There are about 3,600 electric utilities in the United States. In 1971 it was estimated that these utilities were operating more than 300,000 miles of overhead transmission lines, occupying about four million acres of land for rights-of-way, according to a recent report done by the State University of New York.

With the demand for electrical power doubling each decade, it was estimated that 100,000 miles of new transmission lines would be constructed on 1.5 million acres of rights-of-way each decade for the rest of the century. This would mean an estimated 600,000 miles of overhead transmission lines on seven million acres of land by the year 2000.

Vegetation management on these lines is a matter of great concern to the power companies and to others concerned with the environment. This report was written after an extensive review of the literature, interviews with the vegetation managers and researchers, and on-site inspections of many

transmission lines throughout the eastern United States. Copies of this report are available upon request from the State University of New York, College of Environmental Science and Forestry, Syracuse, N.Y. 13210.

## Rhodia Inc. Announces Plan For New Herbicide Plant

Rhodia Inc., Monmouth Junction, N.J., has announced plans to construct a new herbicide manufacturing plant at its Portland, Ore. location.

When completed this fall, the plant will double Rhodia's production of two methyl, four chlorophenoxyacetic acid (MCPA) as well as bring on stream ability to produce two methyl, four chlorophenoxypropionic acid (MCP). The company said MCP is a herbicide used to control weeds and clover in turfgrass and lawns. Spokesmen for the company said the production of both products has been planned to supply the current and anticipated market needs and the plant can be expanded further as the market requires.



Representatives from 19 states participated in the recent legislative conference sponsored by the American Association of Nurserymen in New Orleans. The meeting, attended by state and regional association executives and legislative chairmen, dealt primarily with state legislative problems, such as taxation, labor laws, OSHA, license laws, etc. Participating in the conference were: (bottom from left) Roy Hacanson, Wash.; Gary Gern, Mo.; AAN administrator Leo Donahue; Honore Hacanson, Wash.; Curtis Peterson, Fla.; Jane Barry, Mont.; AAN president Palmer W. Bigelow, Jr.; AAN executive vice president Robert F. Lederer; and Joe Weston, Mo. (middle from left) Dr. James A. Foret, La.; Harold Thornhill, Ala.; Rudy Hough, Miss.; Hunter Boulo, Ala.; David Spencer, Ill.; Keith Law, Minn.; Dr. J. H. Tinga, Ga.; Larry Little, N.J.; and Bill Bradshaw, Tex. (top from left) Jack Wick, Calif.; George Hoar, Utah; Charlie Barr, Conn.; Hugh Vann, N.C.; David Laird, Va.; Howard Davis, Pa.; Bill Fullingim, Tex.; Charlie Dunn, Fla.; Kent Langlinais, La.; and John Flemer, N.J.



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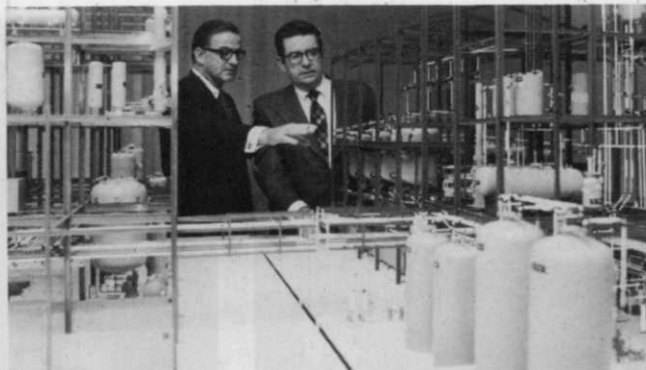
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Standing behind a model of a new bisphenol-A plant to be built at Haverhill, Ohio, Duncan J. MacLennan (left), president, and William W. LaRoche, vice president, USS Chemicals, Pittsburgh, discuss details of the planned 120-million-pound-per-year facility. End uses of the product include fungicides, bactericides and rubber compounds.

## Four Medicap Meetings

Creative Sales, Inc., is sponsoring four dealer-applier meetings this month: two in Ohio and two in Michigan, to review the firm's Medicap injection program . . . iron chlorosis, manganese chlorosis and an update on the experimental systemic insecticide program. EPA clearance for the latter program (Orthene/Medicaps) is expected later this month.

Locations and dates for the meetings: Dayton, Ohio, Imperial House South, March 16; Columbus, Ohio, Ramada Inn North, March 17; Southfield, Mich., Ramada Inn, March 18; and Grand Rapids, Mich., Hospitality Inn, March 19.

The Ohio program will feature Dr. Elton Smith, Extension Specialist in Landscape Horticulture with The Ohio State University. The Dayton, Southfield and Grand Rapids meetings will also feature Dr. James Kielbaso, Associate Professor of Forestry with Michigan State University.

Dr. Smith will discuss Ohio State results with iron and manganese, and Dr. Kielbaso will talk on manganese deficiency/maple decline. Dr. Kielbaso has indicated that manganese deficiency is a major contributing factor to much of the north central and New England maple decline.

Registration (\$5 in advance) can be made with Warren D. Wolfe, 402-727-4800.

## Response of Woody Species To Urban Air Pollutants

In a recent study conducted at Rutgers University in New Jersey, it was determined that among the gaseous pollutants that caused significant damage to plant life were hydrogen fluoride and ozone. The study was done by Eileen Brennan and Ann F. Rhoads.

They said sulfur dioxide damage was conspicuously absent, no doubt due to legal restrictions on burning high sulfur fuels during the period of the study, 1973 through last year. A particulate causing extensive damage was cement dust, and this occurred in a native oak forest 30 years after the dust had been emitted into the ambient air from a local source. Along heavily traveled highways another particulate, cadmium, was detected in appreciable quantities in certain tree species, particularly in pin oak. The paper appeared in the *Journal of Arboriculture*.



## Granular Linuron Control Of Poa Annuua In Bluegrass

*Poa annua* in Kentucky bluegrass varieties grown for sod production purposes can be satisfactorily controlled with 2.5 to 5.0 kg/ha of granular linuron, according to a report given at the recent 30th Annual Meeting of the Northeastern Weed Science Society in Boston. The report was prepared by Dr. Paul Henderlong, Ohio State University professor, and Paul L. Jacquemin, research agronomist at O.M. Scott & Sons Co., Marysville, Ohio.

In their paper, entitled "Selective Control of *Poa annua* in Kentucky Bluegrass", the researchers noted their studies were conducted to determine the minimum effective application rates of granular linuron under varying environmental and soil conditions. A representative for O.M. Scott & Sons Co. told WEEDS TREES & TURF its ProTurf Selective *Poa annua* Control is registered in Colorado, Nebraska, Minnesota, Iowa, Pennsylvania, New Jersey, Michigan, Ohio, Indiana, Illinois, New York and Wisconsin for use on bluegrass sod fields only, because of the low linuron tolerance of other grass species.



A design award for the belt-tensioning adjustment assembly on belt-driven centrifugal pumps was recently given to Hypro Division, Lear Siegler, Inc., by the Gray & Ductile Iron Founders' Society. The award was accepted on behalf of Hypro by Ramon Pareja (right), engineering vice president. It was presented by Albert W. Gruer Jr. of the Society. Hypro is in St. Paul, Minn.

## Butz Names 12 Scientists To Plant Genetics Board

Secretary of Agriculture Earl L. Butz recently announced the appointment of 12 scientists to a United States Department of Agriculture advisory committee of plant genetic resources. Appointed to two-year terms were:

Dr. D. F. Beard, vice president of research, Waterman-Loomis Co., Adelphia, Md.; Dr. William L. Brown, president, Pioneer Hi-Bred International, Inc., Des Moines, Iowa; Dr. Paul J. Fitzgerald, associate deputy administrator, North Central Region of USDA's Agricultural Research Service, Peoria, Ill.; Dr. W. H. Gabelman, professor of horticulture, University of Wisconsin-Madison; Dr. Charles O. Gardner and Meyer Katz, professors of agronomy, University of Nebraska-Lincoln; Dr. Harold D. Loden, executive vice president, American Seed Trade Association, Inc., Washington, D.C.; Dr. Don C. Peters, professor and head, Department of Entomology, Oklahoma State University, Stillwater; Dr. Charles M. Rick, professor and geneticist, University of California-Davis; Dr. H. F. Robinson, chancellor, Western Carolina University, Cullowhee, N.C.; G. F. Sprague, professor of

plant breeding and genetics, University of Illinois at Urbana-Champaign; and Dr. Sterling Wortman, vice president, Rockefeller Foundation, New York, N.Y. Robert W. Long, assistant secretary of agriculture for conservation, research and education, will serve as chairman.

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## Underground Installation Done with Vibratory Plow

Vibratory plowing has proved to be the most economical and efficient way of making the underground electrical installations for a complete park lighting system in St. Louis, Mo. Welsbach Electric Corp., with home offices in New York City, had the contract with the city for the lighting job at Willmore Park located in South St. Louis. It included burying 20,000 feet of one-inch cable conduit and the setting of 125 concrete poles for mercury-vapor lights.

Kenneth Sipe, Welsbach's Midwest regional manager, leased a Ditch Witch R65 Combo to handle the underground aspects of the job. The unit is manufactured by Charles Machine Works, Inc., Perry, Okla.

"We plowed in almost all of the conduit," Sipe told WEEDS, TREES & TURF. "Maybe 100 feet or so was trench." Since the unit has both a trenching assembly and vibratory plow on the rear of the vehicle, the one machine was able to

do both the trenching and plowing. "We had never plowed this type of job before," he said, "and I'm extremely pleased with the way it went. I don't believe it would have been possible to trench any faster than we were able to plow. We got a



good 30 feet per minute on the plow runs. We never ran the unit a full day because we couldn't keep up with it setting the poles."

The conduit was installed at a depth of two feet. Sipe said the job originally was bid to be put in with one-inch conduit with an alternate of one-inch rigid PVC and a second alternate of one-inch cable conduit. "The third method was so much more economical," he said, "the city chose to go with it. It's the first time the city has used this type of construction."

Because of the diameter of the cable conduit, the material was pulled into the ground with the vibratory plow. A short starting trench was dug, the cable conduit was attached to the plow's pull blade, the plow assembly was positioned in the starting trench, the plow was started and the vehicle moved forward. Most of the plow runs were about 100 feet.

"We're most pleased with the lack of turf damage," he said. "This is especially important in a park area and this is a beautiful park. No restoration was required in the plowed areas and this saved many hours of time, and therefore money. After a single rain, it's almost impossible to see where we've been. Sipe said the plow cut easily through tree roots and moved rocks from the path of the cable conduit. Some of the rocks were quite large, he said. "Another plus for vibratory plowing," he said, "there was never any open trench for anyone to fall into. There were a lot of kids in the park while we were working, so that potential danger was eliminated."

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## Colorado Superintendents Choose Gary Vitt President

Gary Vitt, superintendent at Rolling Hills Country Club, Golden, Colo., is the new president of the Rocky Mountain Golf Course Superintendents Association. He replaces Jan Niedziela of Eagle Vail Golf Course.

Other officers are: Jack Maurer, Pinery Golf Course, vice president; Dave Tooley, Greeley Country Club, secretary-treasurer; and Dan Coffin, John Bartley and Jim Kaasch, board of directors.

## Research Efforts Expanded By Diamond Shamrock Corp.

Diamond Shamrock Corp., Cleveland, has announced a multi-million dollar expansion at its T. R. Evans Research Center near Painesville, Ohio.

The first phase of the expansion will include the building of a new laboratory building for life sciences research. This expansion is part of the company's plan to increase its

research effort by 20 percent in the next five years.

## Stauffer, Allied Chemical Post Fourth Period Gains

Allied Chemical Co., Morris Township, N.J., and Stauffer Chemical Co., Westport, Conn., reported large fourth quarter earnings gains. Stauffer's full-year profit was also ahead of 1974. Allied's was 20 percent lower than a year earlier, although 1975 was its second-best year ever.

Stauffer said fourth quarter net was \$22.9 million, up 16 percent from \$19.7 million a year earlier. Sales rose five percent to \$239.1 million from \$226.8 million. Allied said based on preliminary unaudited figures, its earnings in the final period were about \$33.6 million, a 41 percent increase from \$23.8 million of a year earlier. Allied said the company's chemical business, paced by fertilizers, had recorded increased earning during the year.

## Nurseries Miss Bigger Sales, Merchandising Experts Says

One of the nation's foremost merchandising authorities told about 200 plant nurserymen recently they could be missing many opportunities for bigger sales.

Richard Marcus, president of Nieman-Marcus, Dallas, advised members of the annual Nurserymen's short course at Texas A&M University that sales can be improved by honoring three fundamentals: service, merchandising and an attractive physical environment. "Looking upon the nursery business from the standpoint of hobbyist, customer and merchandiser — and I am all three — I often see a lack of knowledge of the products and sometimes a lack of any selling at all," he said.

Too often there is little follow-through on sales, he said. The nurserymen should find out why some customers do not return. Established customers should be kept informed about any merchandise in which they are especially interested.

"Such practices as these will cost the retailer more, but they should

pay off," Marcus said. He described effective merchandising as the ability to be innovative, to edit out what is unproductive. Customers should be made to feel important. Physical environment is also important to a successful business, he said.

## Columbus Golf Association Awards Turf Scholarship

James E. Maxfield of Cincinnati is the second recipient of the Columbus District Golf Association agronomy scholarship at Ohio State University.

He has worked five years at the Camargo Country Club in Cincinnati and will work this season as Kings Island Golf Course near Columbus.

## Vedder Elected President Of Aviation Association

James Vedder of Visco Flying Co., Inc., Imperial, Calif., has been elected president of the National Agricultural Aviation Association.

He succeeded James Maxwell of Benoit, Miss. Also serving with Vedder are vice president Don Holmes of Clay Center, Kansas; Alfred Dahl of Cogswell, N.D., secretary; and Hugh Wheelless of Dothan, Ala., treasurer.



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## Arizona Turfgrass Council Sets Annual Equipment Show

The Arizona Turfgrass Council will hold its Second Annual Turfgrass Materials and Equipment Show at Veterans Memorial Coliseum, Phoenix April 14.

There will be 140 booth spaces featuring local and national distributors, manufacturers and suppliers representing industry pro-

ducts and equipment. There will also be educational seminars.

For further information contact Ralph Hull, P.O. Box 4356, Phoenix, Ariz. 85030.

## Siebenthaler Opens Firm In Clearwater, Florida

Jack Siebenthaler, landscape architect and a prominent figure in the

environmental horticulture industry, recently opened his own private practice for design, public speaking and consultation.

Located in Clearwater, Fla., he has over 30 years of experience in the horticulture business. He is a former president of the Florida Nurserymen and Growers Association, lieutenant governor of the American Association of Nurserymen.

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## Compensation for Removal Of Trees Near Power Lines

The efforts of the Line and Properties Departments at Knoxville Utilities Board, Tennessee, are producing lovely flowering dogwood, flowering crabapple and red-bud trees under Knoxville power lines rather than stubby, chopped-off-at-the-top silver maples or other large, fast-growing trees, according to Charles Hancock of the Knoxville Utilities Board. His remarks were published in the newsletter of the Utility Arborist Association.

"The idea of planting low-growing ornamental trees on customers' properties to compensate for the removal of low-quality, fast-growing trees near power lines has been considered for some time," he said. "In the spring of 1973, a decision was made to begin such a program as a means of reducing the cost of maintaining line clearance throughout our area." He said the board has over 205 miles of transmission lines and over 3,600 pole miles of distribution and primary lines. The board serves all or parts of seven counties in Tennessee and has about 100,000 meter customers.

"One of the most popular and most attractive low-growing trees in the Knoxville area is the flowering dogwood, he said. "This tree was used to start the replacement program."

He said the purpose of the program is not to eliminate every tree that grows near power lines, but only to remove those that have an excessive rate of growth each year and are not beneficial to the customer or the landscape. According to a study made before the project was initiated, if trees that now need pruning away from lines once or twice annually are removed and replaced with low-growing trees that never need pruning, it would provide instant savings in the area of line clearance. "Therefore, whether a tree needs pruning twice a year or once every five years, a definite savings is realized with our present replacement program," he said.

"In actual practice," he said, "We have found that the removal cost for the trees is little more than the routine pruning cost would have been for that time. The cost for trees and labor involved in planting them has averaged about \$10 a tree."

"Before the problem trees are removed and replacement trees are planted, a prepared written agreement is presented to the customer for signature," he said. "The agreement states, 'KUB guarantees a live tree that will put out leaves the spring following planting; the tree becomes the responsibility of the customer at this point.'