

butter business, these estates are slowly but surely disappearing from the American scene.

But they're being replaced, Felix prompted, with the "estate-lette," a \$50,000-range house which, while smaller than the estate of the past, has more grounds than the ordinary middle-class residence.

These affluent ex-urbans consider a tree service as one of a growing number of indispensable status symbols. Since landscaping is generally part and parcel of the property, opportunities for increased service and profits abound among these posh estatelettes throughout the land.

Unless these three markets, especially the last, are cultivated, Felix observed, there will be no market at all for private tree work in the future. But there is no doubt that the markets will be developed, and that these new concepts will spur commercial arboriculture to new heights of professional service and sound profits.

Felix's companion on the National Arborist Association program was Henry F. Davis III, president of Lowden Tree Specialists, Inc., of Needham, Mass.

Davis outlined the ramifications of shade tree spraying, especially campaigns to curb Dutch elm disease.

A deep sense of public responsibility has inspired Lowden personnel to keep close tabs on the nature of tree spraying and the public hazards which may be involved. The company has been spraying trees for control of insects and diseases since 1946, and a successful history has enabled the firm to offer guarantees which, if not unique in the industry, are certainly rare.

Elm Guarantee Fourfold

After a customer's elms have been treated by Lowden for 3 years, the firm guarantees to perform any work free of charge if Dutch elm disease strikes. Conditions for this guarantee are fourfold: (1) The customer must have had the regular recommended spraying program for 3 years; (2) the trees must be sprayed twice each year; (3) customers must not cancel a scheduled spraying, or permit any other firm to work on the trees under contract; and (4) there must be no diseased trees within 350 feet of the trees under contract.

Davis said this program has been highly successful, and has

not only helped build the volume of elm spraying his firm performs, but has also helped in the realm of general public relations.

Throughout the program of the 39th convention of the International Shade Tree Conference, concern of delegates about the professional stature of arboriculture was evident. A resounding challenge to the membership at large was delivered by Dr. John A. Weidhass, whose talk on professionalism and ethics among tree companies struck a keynote of quality for the industry as a whole.

Dr. Weidhass, an entomologist, is associated with Cornell University in Ithaca, N.Y.

Has the image of the arborist kept pace with the changing times? the scientist prodded. Has the tree company mastered the concept of public relations, which in our day has itself reached the status of a science, with skilled practitioners who ply their trade expertly?

While strides have already been made, Weidhass is optimistic about the work which can yet be accomplished in conveying to the public, and to the arborist industry itself, the nature and value of America's tree expert companies.

How are these advances to be brought about? One way, the Cornell technician suggested, is through a strengthened National Arborists Association, with larger membership, increased staff, and broader scope of activities.

Weidhass had high praise for Dr. Paul Tilford and his NAA work, and dwelt on the possibility of using the association to make even greater gains for the industry. But arborists themselves must be willing to give generously of their



Reaction of public to shade tree spraying was analyzed by arborist Henry F. Davis III.

time, funds, and energies if the association is to move to new heights of service and accomplishments, the entomologist warned.

NPCA Good Example to Follow

Dr. Weidhass cited the National Pest Control Association as a good example of a well-supported industry organization which has made remarkable headway in establishing ethics, ability, and sound management.

Thunderous applause greeted Dr. Weidhass on the completion of his dedicated and inspired address. A panel of industry leaders then discussed the doctor's points as they actually apply to the past and present practice of arboriculture in the United States.

Consisting of W. E. Parker, Hackett C. Wilson, Frank Vaydik, and E. Earle Martin, introduced as a quartet of highly qualified tree men, the panel found immediate application for many of Dr. Weidhass's suggestions.

Wilson owns Wilson Tree Serv-



A new set of leaders for the Shade Tree Conference. Officers for the coming year are (left to right) President Spencer H. Davis, Jr.; Vice President J. A. Dietrich; Secretary-treasurer L. C. Chadwick; and Editor Paul E. Tilford.

ice of Shelby, N.C., one of the largest arborist operations in the entire South. A past president of the International Shade Tree Conference, Wilson was eminently qualified to delineate his views for the attentive congregation.

Wilson agreed that the industry is moving forward in its efforts to achieve public acceptance. But he warned that irresponsible fiscal policies must be avoided, and that sound pricing and close attention to costs must always prevail.

The southerner deplored the financial carelessness which seems



Congratulations were extended to Canadian Howard B. Dunnington-Grubb, (left) a Toronto landscape architect who was given honorary membership in the International Shade Tree Conference. Maunsell Van Rensselaer (right), '62-63 ISTC prexy, guided this year's convention.

to characterize the policies of modern governments, and modern industries. "A day of reckoning for American business ethics is at hand," Wilson warned.

Arborist W. E. Parker of Moorestown, N.J., agreed with the general tone of the discussion, but reminded his audience that whether or not arboriculture is a "professional" activity depends largely on the individual.

No amount of education without experience, and no amount of experience without some educa-

tion, can raise the tree company operator to the professional status which he seeks. And education, ambiguous and elusive, is obtained in many ways.

"Don't forget that the 'old-timers' in this business have gained a tremendous education," Parker asserted. "These men have their notebooks and their memories which augment the institutional training which is available."

Vaydik, who is superintendent of forestry and grounds maintenance for the city of Detroit, Mich., delivered the municipal arborists' point of view in the round-robin discussion of arboriculture today.

"In-service training is the most practical steppingstone to increased stature," Vaydik felt. The practice of training a very large staff has led the Detroiter to use the on-job technique. He is quite pleased with the results he has had.

"These brass-tacks educational efforts have helped raise the level of our service personnel," Vaydik said.

Dr. S. H. Davis, Jr., who was later elected '63-64 president of the International Shade Tree Conference, moderated the panel and introduced principal speakers. Dr. Davis is from Rutgers University in New Brunswick, N.J.

Man and Insects Locked in Battle

"Throughout the ages of recorded time, man's every forward step has been challenged by those universally present competitors we know as insect pests," Dr. George C. Decker proclaimed in introducing his analysis of the real problem over the use of chemical pesticides.

A world-renowned entomologist, Dr. Decker is Principal Scientist and Head, Section of Economic Entomology, Illinois Natural History Survey, Urbana.

The Illinois authority's level-headed attack on the virulent and unscientific figures in the



Equipment on display fascinated Dr. Paul E. Tilford, Executive Secretary of the National Arborists Association, who paused to watch a large aerial lift.

public press who have violated their journalistic and scientific responsibility was a welcome event for the members of the gathering, who have themselves been subjected to abuse over the use of spray chemicals to protect trees.

"Remember, for example, that 75% of all foodstuffs confiscated by the Food and Drug Administration is contaminated biologically, not chemically," Dr. Decker affirmed. This certainly points out that the pest problem in general is more acute than the general chemical problem, Rachel Carson notwithstanding.

And Dr. Decker begged his audience to remember too that the early American colony in Jamestown was once reduced to only six able-bodied men, when the rest of the pioneers were laid low by the ravages of malaria, carried of course by a mosquito.

"It has been appropriately said by Col. A.W.A. Brown of the University of Western Ontario that modern pesticides should be used as a stiletto and not as a scythe," the distinguished scientist summarized. "The same is true of criticism—we should pinpoint faults and errors and refrain from making sweeping indictments.

"Well-founded criticism, caution, and even a certain degree of skepticism are wholly justifiable and conducive to constant improvements, but the misrepresentation or exaggeration of facts and the utter disregard of truth in behalf of any cause is deplorable and morally wrong," Dr. Decker concluded.

"Nature has no sympathy for a tree that is badly injured."

This comment by C. L. Wachtel of Wachtel Tree Science and Service Co., Wauwatosa, Wis., was indicative of the need which gave

Quarter of experts trained their collective knowledge on some common tree ills. Left to right are Dr. Robert Brandt, Dr. Marvin Fowler, President S. H. Davis, and Dr. D. S. Welch.



rise to the arborist industry in the first place—tree surgery.

Wachtel, in his Monday afternoon address, pointed out that before any extensive tree surgery is performed, extensive diagnosis must be carried out.

He recommended that close attention be paid to drainage when a major filling is installed in a damaged tree.

Examine 3 Tree Ills —

For this technical interlude, conference guides had assembled a trio of scientists whose valued insights and information were typical of the general high quality of the 39th International Shade Tree Conference convention.

— Ash Dieback

Leadoff man in the technical triumvirate was Dr. Robert N. Brandt, U.S. Forest Experiment Station, New Haven, Conn., whose subject, "Ash Dieback in the Northeast," was of intense interest to the gathered arborists.

"As of this summer, ash dieback has been seen from Maine to Michigan and southward to Maryland and West Virginia," Dr. Brandt commented in his introduction.

The disease attacks both white

ash (*Fraxinus americana*) and green ash (*Fraxinus pennsylvanica*) but most of the damage is done to white ash.

Over the past few years, no tree once diseased with ash dieback has been known to recover.

Unfortunately the cause of this disease has not yet been discovered, although tree scientists from all over the world (including Russia) are working on the problem.

"There is evidence that some widespread effect, such as a prolonged moisture deficiency or some other major environmental change, has caused the losses in host vigor and such weakened trees are then susceptible to organisms of lesser importance," Dr. Brandt revealed.

There is a lack of knowledge about the cure of the disease which is as obscure as the cause. But the Forest Service official did make some recommendations.

"For lawn and street trees I can only recommend that every effort be made to keep the trees healthy through use of a good fertilization and watering program. Pruning out the dead and dying branches cannot be relied upon to eliminate the dieback



A call to arms for progressive arborists was delivered by Dr. John A. Weidhass.

because it seems to occur only as a result of overall low tree vigor."

— Maple Decline

Maple decline in the Northeast was another topic which gripped the arborists during the convention's early days.

Dr. D. S. Welch, Department of Plant Pathology, Cornell University, Ithaca, N.Y., analyzed this current ailment which is growing in importance. "One is lead to suspect that more than one disease is at work in maple decline," the Cornell authority said.

Among the symptoms of maple



CYCLONE P.T.O. MODEL S-3 POWER SEEDER. Does a fast, accurate job, whether used for top dressing nitrate, applying potash or phosphate, sowing small grains, legumes or grasses, or spreading granular pesticides. Spreads up to a 30-foot swath.

Operates from heavy duty, flexible drive shaft which fits standard power take-off on tractor. Double agitator, easy setting rate gauge, and positive shut-off. Three-bushel size shown above. Extension hopper adds two bushels to capacity. One and two and one-half bushel models also available.

ELECTRIC MODEL M-3, shown below, is similar to Model S-3, shown and described above, except powered by a self-contained electric motor that operates from the electrical system of vehicle on which it is mounted. Can be mounted on front or rear of a tractor, truck or jeep. One and three bushel capacities.



THERE'S A *Cyclone* FOR ALMOST EVERY SPREADING AND SEEDING JOB



CYCLONE MODEL 20 HAND SPREADER. For fast, precision spreading of pelleted and granular fertilizer and chemicals . . . also seed. Covers a 6- to 8-foot swath. Feathered edge prevents streaking. Galvanized hopper holds three gallons or approximately twenty pounds. Shield protects operator.



FAMOUS CYCLONE HAND SEED SOWER. Accurately and quickly distributes all smooth grass seed and grain . . . also pelleted and granular fertilizer. Exclusive double-oscillating feed. Instant shut-off. Covers a 7- to 28-foot swath. Feathered edge prevents streaks.



POPULAR CYCLONE LAWN SPREADER. Famous for speed, freedom from streaks, accuracy. As little as four ounces of pesticides per thousand square feet may be spread with absolute accuracy. Covers a 6- to 8-foot swath. Fan-shaped spread pattern, shown below, has feathered edge to prevent streaks. Ideal for fast, accurate spreading of pelleted and granular fertilizer, herbicides, insecticides, seed, lime, ice melters, etc.

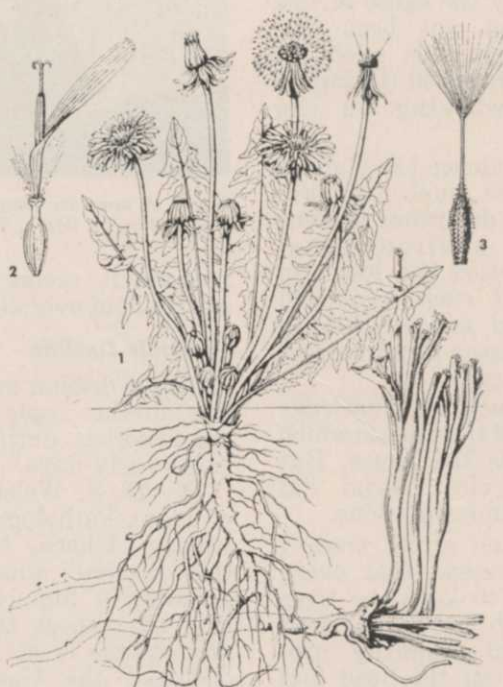


Contact Your Distributor or Write Us for Further Information

THE CYCLONE SEEDER CO., INC.

URBANA 36, INDIANA

DANDELION
(*Taraxacum officinale*)



Dandelion is a perennial which reproduces both by seed and by sprouting at the roots. Next to crabgrass it is probably the most common weed around homes, but it is well adapted to meadows, roadsides, and waste places. Widespread throughout North America, it is easily recognized either by the bright yellow head of many tiny flowers in May and June, or by the cottony tuft or "blow-ball" which it forms when the seeds are ready for dispersal (1).

Upon sprouting the stem remains very short (flush with the ground), forming a rosette of toothed leaves. Leaves, 3 to 10 inches long, are covered with short hairs and have a milky juice. From this rosette grows a hollow shoot (scape) which will bear a single head made up of many tiny flowers. When each minute, single-petaled flower (2) has been pollinated, the green sepals close over the flower and appear as they did before it first blossomed. When they open again the feathery tufts, each bearing one seed, are ready to be shed on the wind. The seeds themselves are oblong, 3/16-inch long, longitudinally ribbed, and barbed at one end (3).

The root is a fleshy taproot (growing straight down, like a carrot) with branches which can form new plants.

Chemical control of dandelion is still dependent upon postemergent treatment. Dandelion is controlled by foliage sprays of the phenoxy compounds such as 2,4-D; 2,4,5-T; MCPA; and silvex.

Applied in the spring or fall, these chemicals will eliminate broad-leaved weeds. Treatment is recommended for fall; otherwise spaces are left when the dandelion dies. In the fall these spaces will readily be filled with desirable grass; in spring chances are that crabgrass or another weed will move into the vacant spaces.

Prepared in cooperation with Crops Research Division, Agricultural Research Service, United States Department of Agriculture, Beltsville, Maryland.

(DRAWINGS FROM NORTH CENTRAL REGIONAL PUBLICATION NO. 36, USDA EXTENSION SERVICE)

decline are dwarfing, chlorosis, and early defoliation. It has been observed that decline frequently follows attacks of tent caterpillars; cumulative dry periods are also believed to contribute to the progress of the disease.

High nitrogen factors may be helpful to stem the epidemics of maple decline, while relative heat and cold seem to be unimportant.

"Has there been a correlation in temperature cycles and outbreaks of maple decline?" asked Theodore J. Haskell, city forester from Lansing, Mich.

Haskell explained that a rise in mean temperatures over a period of years might cause trees to require more moisture, which in turn could influence a variety of tree ailments.

Dr. Welch replied that this factor is being considered, but that results thus far are inconclusive.

— **Sweetgum Blight**

Continuing the examination of some acute disease problems with which arborists are concerned, Dr. Marvin E. Fowler detailed the causes and symptoms of sweetgum blight.

Dr. Fowler is Chief of the Division of Forest Disease Research Northeastern Forest Experiment Station of the USDA in Upper Darby, Pa.

"Sweetgum blight is the major disease that affects one of our very important ornamental, shade, and forest trees — the sweetgum (*Liquidambar styraciflua* L.)," Dr. Fowler remarked.

The blight, first observed in Maryland in 1948, spreads rapidly once established, and increases in severity.

Sweetgum blight is probably the result of insufficient available water, Dr. Fowler mused.

Earliest indication of the sickness is a premature flush of fall coloration on one or more branches. This may occur several weeks before normal fall coloration shows up on healthy sweetgums.

Next spring the diseased branches may be dead or some of the buds on these branches may fail to open, and the foliage developing from other buds may be strikingly dwarfed and chlorotic.

"There is no known control for sweetgum blight in forest stands or in individual shade trees," Dr. Fowler said in summary. "Research indicates that pruning infected branches and applying fertilizers will not effectively con-

(Continued on page W-18)

Calif. Sets Turf Trade Show

West Coast turfmen will have a chance to inspect products of more than 100 suppliers during the Official Turfgrass Industry Trade Show of California, to be held in Pasadena, Oct. 16-17.

Event is designed to bring together a variety of equipment and materials related to the turfgrass and nursery industries, for the benefit of professional members of the turf industry.

For more information on the trade show, write Gordon Lindsey, publicity director, Southern California Turfgrass Council, American Poultry Guano Corp., P.O. Box 332, Cucamonga, Calif.

Turf Reseeding

(from page W-9)

used for golf green winterseeding in Houston, usually in mixture, about 6-9 lbs./M (compared to 40 or 50 lbs. with ryegrass). Seedings at River Oaks Country Club were visible within a week, and none suffered so severely from the cold as did ryegrass. The finest Kentucky bluegrass putting green seen was at the Houston Country Club. Both Kentucky bluegrass and Pennlawn fescue seedings were made November 10, and the putting surface was perfect by February.

In Florida Dr. Prevatt has been successful with fine fescue-bluegrass and bentgrass combinations in the Lakeland area. Dr. Burt at the Plantation Experiment Station, and the University of Florida at Gainesville, have other winterseeding successes. One disadvantage found with *Poa trivialis*, both in Florida and Texas, is that this imported seed often brings with it troublesome rosette crucifer weeds.

Dr. Marvin Ferguson of the USGA Greens Section agrees that the winterseeding of southern golf greens is in a state of experimentation and flux. He is reluctant to advance firm recommendations until additional research can prove-up techniques and grass types. Mixtures of the grasses seem a way "to spread the risk"; if one species finds conditions adverse, another may not. A mixture of Highland bentgrass, Kentucky bluegrass, and Oregon fine fescues supplies high-quality potential, — and *Poa*

trivialis might be included, too, if its yellowish color and tendency to bring in weeds is not objectionable. Most people prefer the darker green of the previous three grasses, although where *Poa annua* is an abundant weed, the yellowish color of *Poa trivialis* matches it pretty well.

Commercial Properties and Homes

Lawns of homes and commercial properties offer tremendous potential. Attractive turf is especially important for motels during tourist season. The same holds for shopping malls, funeral homes, and other commercial properties. Given time and sufficient promotion, winterseeding may catch on more fully, too, for the home.

Conclusions voiced for golf courses apply generally to commercial properties and homes, although a winter stand is more easily achieved, because the pressure of intensive use is not quite so great. Recent tests at Mississippi State University indicate that greatest success with the bluegrass-fescue-bentgrass seed mixtures is obtained when the permanent grass is mowed $\frac{3}{4}$ inch or less prior to overseeding in autumn. The University of Arizona notes that ryegrass needs more frequent mowing than bluegrass-fescue-bentgrass, and probably exhausts water supplies more completely. Highland bent offered little competition to revival of bermuda in 1961 tests.

For the Future

Although quick knockdown and winterseeding are not thoroughly developed markets, their feasibility is well established. Chemicals, equipment, and seed are readily available for renovation, upgrading, and annual bolstering. But other potentialities shape up, too. Pesticide applicators might like to think about, perhaps experiment a bit with, (1) slurry seeding, and (2) de-thatching services.

Slurry seeding requires special power sprayers only recently widely available (viz. the Hydroseeder of the Finn Equipment Company, Cincinnati, or similar machines made by Bowie Machine Works, Bowie, Texas). The technique has been most widely developed for roadsides. For a number of years a slurry containing seed and fertilizer has been sprayed upon the roadside with the Hydro-

seeder, to be followed by straw mulch with asphalt tack. More recently, a mulch derived from wood pulp (Turfiber) has been included, making possible a seeding-feeding-mulching operation all in one. The mulch functions more effectively for soil holding than as a moisture barrier, but nonetheless it is intriguing to consider the possibility of a small Hydroseeder for seeding home yards (perhaps given preliminary knockdown chemical spray). The tie-in seems a natural for lawn spray services.

De-thatching Has Possibilities

De-thatching, too, appears destined for future popularity. Heavy grass growth is an inevitable outcome of sophisticated lawn tending, the demand for better, more vigorous lawns. Need for occasional thinning is already widely accepted for elite turfs such as bentgrass. Trailing lawn-grasses of the South, or almost any grass urged to splendor by heavy feeding, tend to thatch.

Several lawn thinners or de-thatchers have been developed to remove the organic debris (thatch) which accumulates deep in the sod. With some grasses, such as zoysia, this can become persistent enough to hinder insoak of water. In almost all cases thatch prevents access of new seed to soil.

While many of the thinning machines tear the sod and disfigure the turf temporarily, at least one (the Thatch-O-Matic) has been developed to comb out the thatch without serious mutilation to the living leaves. The machines are not expensive, and one might surmise the extent to which they might serve a lawn-tending service. De-thatchers are just as impressive to a homeowner as are aerifying devices, however.

Thus, de-thatching would seem a logical preliminary to Hydroseeding or bolster seeding wherever appreciable thatch prevails. In fact, routine de-thatching and power sweeping prior to almost any lawn service (fertilization, weed control, bolster seeding) might make the operation more certain. Thatch can result in irregular penetration of materials, and hence imperfect performance, even though the sprayer gives perfect distribution.

Weed Society of America Plans Feb. 10-13 Confab in Chicago

Program arrangements are now being completed for the 1964 meeting of the Weed Society of America, set for the Pick-Congress Hotel in Chicago, Ill., Feb. 10-13.

First call for papers to be submitted for the convention has already been issued, with the deadline for submission of titles and abstracts set for Oct. 1. Titles and abstracts should be sent to the appropriate section chairman, with copies sent to the program chairman for the meeting, Prof. G. F. Warren, Department of Horticulture, Purdue University, Lafayette, Ind.

Chairmen of sessions of special interest to contract applicators include: Section III, The Control of Weeds and Woody Plants in Rights-of-Way and Other Industrial Sites, chaired by Dr. R. P. Upchurch, Field Crops Department, University of North Carolina, Raleigh;

Section VII, Weed Control in Turf, with Dr. R. W. Campbell,

Department of Horticulture, Kansas State University, Manhattan, Kansas, as chairman;

Section XI, The Control of Aquatic and Marginal Weeds, chaired by James T. Davis, Fish and Game Division, Louisiana Wildlife and Fisheries Commission, P.O. Box 308, Monroe, La.; and

Section XII, Chemical and Mechanical Weed Control Equipment, with W. G. Lovely, USDA Agricultural Engineering Department, Iowa State University, Ames, Iowa, as chairman.

For more information on the 1964 meeting, or membership blanks for the Weed Society of America, write to Dr. F. W. Slife, treasurer-business manager, Weed Society of America, Department of Agronomy, University of Illinois, Urbana, Ill.

More program details will appear in *Weeds and Turf* later this year.



Anti-bridging agitator on the Greenskeeper, new spreader from Sunnyhill Research and Manufacturing Co., broadcasts peat moss, fertilizers, herbicides, lime, and seed, among other materials. Spreader has an independent power supply, with agitator and feeding mechanism electrically controlled by magnetic clutch.

Sunnyhill Markets Spreaders

Three new tractor-pulled material spreaders, the Greenskeeper, the Landscaper, and the Suburban, are now being manufactured by Sunnyhill Research and Manufacturing Co.

Machines have an independent power supply to operate the spreader mechanism, eliminating the need for power take-offs from the pulling vehicle. Powered by Clinton gasoline engines, spreaders can broadcast material over a 25-foot swath.

A special agitator bar prevents any clogging in the hopper opening, the firm reports. Auxiliary dual feed and agitating members feed material to the hopper opening by moving the material back and forth, and also keep material in the hopper in motion to prevent bridging.

A new brochure on the three spreaders is available to CAs without cost. Write the Sunnyhill Research and Manufacturing Co., Imperial, Pa., for a copy.

West Coast CAs Set Sprayorama

New developments and equipment will be the theme of the 1963 Northwest Sprayorama, scheduled for Sept. 14 at the William Moshier Memorial Park, Burien, Wash., and sponsored by the Washington Assn. of Ground Sprayers, in cooperation with the Oregon Pesticide Sprayers and the Oregon Chemical Applicators Assn.

For more information on this day-long display and program, write M. A. Faulkner, secretary, Washington Assn. of Ground Sprayers, 2820 S. 150 St., Seattle 88, Wash.



An insect-free rose bed was the result of soil sterilization conducted by William Spitz (right), president of Big State Exterminating Co., Houston, Texas, and William Basham (left), the city's horticulturist. Methyl bromide was used to clear the way for more than 3,000 roses in the 11,000 sq. ft. plot.

Houston Plots Rose Garden

Houston, Texas, expects to have one of the most beautiful rose gardens in the country, when final preparations are complete.

More than 3,000 roses were set out in the garden, which covers more than 11,000 sq. ft., late in March. Immediately before the roses were planted, the entire area was sterilized with methyl bromide, conducted by Big State

Exterminating Co. of Houston.

A rich soil was created by mixing dirt with 100 bales of peat moss, 72 yards of wood chips, 250 bags of sheep manure, and several truckloads of clay, topsoil, and sand. Plants were set out with bare roots, to prevent the possibility of any disease entering through a root-ball.

Total cost for the garden is estimated at \$30,000 by city officials.

Meeting Dates



Midwest Turf Field Day, Purdue University, Lafayette, Ind., Sept. 9 (repeated Sept. 10).

Fall Field Day, The Pennsylvania State University, University Park, Sept. 11-12.

1963 Northwest Sprayorama, Washington Assn. of Ground Sprayers/Oregon Pesticide Sprayers/Oregon Chemical Applicators Assn., William Mosher Memorial Park, Burien, Wash., Sept. 14.

70th Annual Farm Equipment Institute Convention, Roosevelt Hotel, New Orleans, La., Sept. 29-Oct. 2.

22nd Annual Short Course on Roadside Development, Columbus, Ohio, Oct. 8-11.

30th Annual National Agricultural Chemicals Assn. Conference, The Homestead Hotel, Hot Springs, Va., Oct. 27-30.

Annual Washington State Weed Conference, Chinook Hotel, Yakima, Wash., Nov. 4-5.

Shade Tree Conference

(from page W-14)

trol the disease. Nevertheless, we recommend that valued sweetgums on lawns or streets be given the best care, which should include watering during droughts, and fertilizing and pruning as needed," he concluded.

Effect of Flooding Studied

Another technical study of great importance to arborists was described by George Yelenosky of Duke University's Department of Botany. Yelenosky is conducting research on soil aeration and tree growth on Duke's campus in Durham, N.C.

When soil was flooded in Yelenosky's tests, a rise in pH was noted. This could be significant in treatment of areas where flooding has occurred.

Heavily-traveled areas where soil is compacted were also studied to determine how aeration, and subsequently tree growth, are affected.

In experiments with tuliptree and sugar maple seedlings, both species exhibited hypertrophy of the stem area which had been under compacted soil.

Yelenosky concluded with a recommendation that more research be undertaken in the entire field of soil aeration and tree growth.

In a discussion of Dutch elm disease by a variety of experts, Dr. J. C. Carter of the Illinois

Natural History Survey said that one of the most promising developments in current research on Dutch elm disease is the use of systemic chemicals which may someday give a control for the disease.

He also pointed out that some species, such as Christine Buisman and Bea Schwarz elms, are resistant to the disease.

Dr. Carter's remarks were followed by a panel discussion by Joseph A. Dietrich, Park Superintendent, Greenwich, Conn.; John C. Van Camp, Midwest Shade Tree Consultants, Rockford, Ill.; and George W. Dalby, Superintendent of Horticulture, Niagara Falls Commission, Niagara Falls, Ontario. Because of concurrent sessions, delegates had to decide whether to attend the Dutch elm disease talks or the National Arborists Association meeting which featured the Felix and Davis addresses.

Arborists & Shade Tree Assns. Elect Officers For Coming Year

Both the National Arborists Association and the International Shade Tree Conference held business meetings and elected new slates of officers, during the Toronto convention.

Besides President Davis, new officers of the International Shade Tree Conference include vice president Joseph A. Dietrich, City Arborist and Park Superintendent from Greenwich, Connecticut. Dr. Paul E. Tilford remains editor for the ISTC, and Dr. L. C. Chadwick will continue to direct the association in his capacity as secretary-treasurer. Dr. Davis will be in charge of next year's convention.

In National Arborists Association meetings, John Z. Duling, Duling Tree Expert Co., Muncie, Ind., was elected president for the coming year. He will be assisted by Winston Parker, Certified Tree Expert, Moorestown, N.J., who is new vice president.

Dr. Paul E. Tilford retains his office as Executive Secretary.

In charge of the 39th convention was J. S. Kimmel, Toronto City Arborist, who was general chairman of the convention committee. President of the ITSC during the year of preparation was Maunsell Van Rensselaer of the Saratoga Horticultural Institute, Saratoga, Calif.

Houston, Texas, was selected for the 1964 meeting. Dates and hotel site will be announced later, Dr. Chadwick told *Weeds and Turf*.

Trimnings

Last time, we promise. Sick of hearing about Rachel Carson? Last May we talked about an electric power company which gave its employees effective rebuttal material for *Silent Spring* devotees, and now another such publication has come to our attention. This paper, Central Maine Power Company's *The Exciter*, has an amply illustrated article which should train employees of the Augusta, Maine, firm to scuttle Rachel's scurrilous scow with effective dispatch. We hope that the public is as tired of her tirade as we are, and promise to avoid the subject as much as possible in the future!

* * *

Behind-the-scenes-man. We've had so many readers tell us how much they use and need our monthly "weed boxes" that we want to give some credit to one of the scientists who has helped this project along. These species identification features are written by the technical staff of *Weeds and Turf*, and then sent to Dr. Dayton L. Klingman with the USDA in Beltsville, Md., who has been most obliging in his criticisms. Dr. Klingman, who is Leader, Weed Investigations-Grazing Lands with the Crops Protection Research Branch, is a veteran of many years in government service. Apparently he comes from a scientific family, because his brother Glenn is a weed control expert with North Carolina State College in Raleigh. We're sure we act for the industry as a whole when we doff our caps to this duo who've contributed so much to vegetation management in the US. (Any mistakes — heaven forbid — should be blamed on us, not Dr. Klingman!)

* * *

The seaweed surrounds us. Our wandering reporter and keeper of irrelevant facts just wrote in about a farmer in Hartsville, Ohio, who uses seaweeds instead of insecticides to protect his crops from insect damage. This tiller of the soil says he's found the weed product, which comes from Norway, to be most efficient in growing plants which are more resistant to insect and disease damage. For maximum efficiency, the farmer recommends, use about 400 to 500 pounds per acre. Now that's a lot of seaweed. Furthermore, if a careless farmhand applies too much of the Norwegian "pesticide," plants tend to become dwarfed. No mention was made of how much this off-beat product costs, but we wonder about the practicality of importing from Norway 4 to 500 pounds of the stuff for every acre under cultivation!

* * *

Elm-bedecked city nets Metz. While at the International Shade Tree Conference last month we had a chance to talk with Robert R. Metz, who recently became Commissioner of Forestry for the City of Toledo, Ohio. Bob, long active in arboriculture and related fields, has the imposing job of caring for Toledo's famous elms. The Ohioan approaches his job with gusto, and was much in evidence during the technical sessions of the conference. He even took time out to compliment us on *Weeds and Turf*, which he finds helpful in his administrative arborist position. Here's hoping you don't get in "Dutch," Bob!



You can now kill brush on a year 'round basis

The key: Dormant Cane Broadcast — Scientists' concepts of chemical brush killing used to be that woody plants could not be effectively controlled with winter-month application. Diamond, however, sponsored research on this unique application method of brush control with the use of six-pound acid equivalent Line Rider formulations. The results speak for themselves:

• Materials needed reduced • Application time in

hours per acre reduced • Kill effectiveness increased
• Effective spray season lengthened • Hazard of crop damage eliminated • Unsightly brown-out eliminated.

Diamond's experience and specific formulation techniques with dormant cane broadcast can be of help to you. For details on dormant cane broadcast or six-pound Line Rider products, write Diamond Alkali Company, 300 Union Commerce Building, Cleveland, Ohio 44114.



Diamond Chemicals