

GREEN INDUSTRY NEWS

PARKS & RECREATION

Sports Foundation honors five parks

Historic preservation projects, a frisbee/disc golf course, and a skateboard park are just a few of the special programs administered by five park and recreation departments recently honored as Grand Award Winners in the National Gold Medal Awards program sponsored by The Sports Foundation, Inc. recognizing excellence in park and recreation management.

The five winners in their respective population class are:

Class I (over 250,000) — San Jose (California) Parks and Recreation Department

Class II (from 100,000 to 250,000) — City of Anaheim (California) Parks, Recreation and the Arts Department

Class III (from 50,000 to 100,000) — Mesa (Arizona) Parks and Recreation Department

Class IV (from 20,000 to 50,000) — Wilmette (Illinois) Park District

Class V (under 20,000) — Wheeling (Illinois) Park District.

The director of each department was awarded a plaque and a gift of \$1,000 for the implementation of a worthy park project. The presentation was made as part of the 1978 National Recreation & Parks Association (NRPA) Congress for Recreation and Parks at the Miami Beach Convention Center in Miami, Florida.



Directors from the five park and recreation departments honored as Grand Award Winners in the 1978 Gold Medal Awards program sponsored by The Sports Foundation Inc. for excellence in park and recreation management are (l. to r.): Gene Saalwaechter, City of San Jose Parks & Recreation Dept., San Jose, CA; James D. Ruth, Anaheim Parks, Recreation & Arts Dept., Anaheim, CA; Maurice B. Bateman, Mesa Parks & Recreation, Mesa, AZ; Raymond VanDeWalle, Wilmette Park District, Wilmette, IL; and David F. Phillips, Wheeling Park District, Wheeling, IL. Each department was awarded a plaque and a gift of \$1,000 for the implementation of a worthy park project. The presentation was made as part of the 1978 NRPA Congress for Recreation and Parks at the Miami Beach Convention Center in Miami, FL.

The Sports Foundation annually judges park and recreation departments on the basis of improvement, service, continuing development, extent of future planning and degree of participant involvement and acceptance as determined by local needs for the respective park and recreation department program.

Judges for the 1978 Gold Medal Awards were nationally recognized authorities in the field of park and recreation management. The judges included: Dr. Jackson M. Anderson, Coordinator of Graduate Study, Central Michigan University, Mount Pleasant, Michigan; Robert M. Artz, Director and General Manager of Simi Calley Recreation and Park

District, Simi Valley, California; Ted B. Fleckinger, Director of the Great Lakes Region, National Recreation and Parks Association, Des Plaines, Illinois; and Ralph C. Wilson, Chief Recreation Specialist, Department of Agriculture, Washington, D.C.

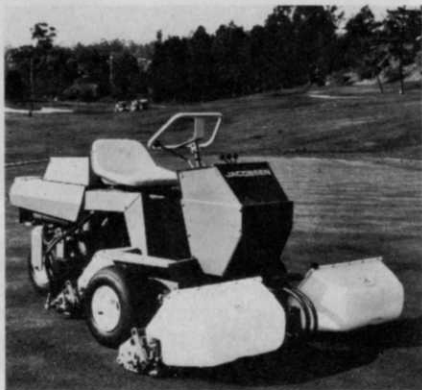
The Sports Foundation, Inc., is a non-profit membership organization founded to stimulate interest and participation in sports-related activities. The Foundation established the Gold Medal Awards for park and recreation management in 1966.

GOLF

Superintendents set for 50th conference

The 50th International Turfgrass Conference and Show of the Golf Course Superintendents Association of America is ready to start in Atlanta, Feb. 4-9.

Besides the usual five days of exhibits and educational sessions, there will be two days of pre-conference seminars in subjects ranging from landscape principles to cardiopulmonary resuscitation.



Three brand new Greens King IIs like the one on the left will be awarded to owners of the three oldest Greens Kings, to celebrate the 10th anniversary of the popular machine. Jacobsen Turf Products will screen serial numbers and dates of purchase for the earliest; then the company's distributors will verify the information and usage. The lucky owners will be announced at special ceremonies at the 50th Annual Turfgrass Conference & Show, Feb. 4-9, in Atlanta, Ga.

Landscape Contractor News

Council releases profile of customers

The Nursery Marketing Council has released data obtained from research of nursery customers.

The information reveals three different types of customers. The first type, which makes up an estimated 20 percent of homeowners, spends seven hours per week in the summer caring for their plants and an average of \$200 per year for plant materials. The other two groups spend about four hours per week in the summer caring for plants and spend \$40 to \$70 per year for plant material.

NMC also found that 25 percent of homeowners look to their local garden center for information on plants and 60 percent depend upon nurseries. Also, mail order plant catalogs are used by only one percent of homeowners.

ALCA urges compliance to Carter guidelines

The Associated Landscape Contractors of America have suggested that contractors, especially those working under government contracts, comply with new wage and price guidelines. Compliance must be documented by contractors and subcontractors. Certificates of compliance are required for government jobs for more than \$5 million. Other penalty situations are unclear.

Basically, prices should not rise an average of 1/2 percent less than the average price increase of 1976 and 1977. A ceiling of 9.5 percent exists for price increases. Wages should not increase more than an average of seven percent.

Houston is location of ALCA annual meeting

Final program details have been released for the 1979 Annual Meeting & Trade Exhibit of the Associated Landscape Contractors of America. The week-long meeting will be held Feb. 4-9, 1979, at the Galleria Plaza Hotel in Houston, Texas.

The ALCA convention will feature some twelve programs on various aspects of landscape contracting, starting with a unique two-session keynote presentation. Nationally-known Dick Seman will present a three-hour program on "Communicate to Motivate" dealing with personnel management in an in-depth analysis.

The Trade Exhibit will be coupled with a unique new program the following morning — the Equipment Demonstration program. Held in a bare-earth field adjacent to the hotel, the session will feature all of the major equipment manufacturers showing and demonstrating their machines for the industry. As the program will be held in a bare-earth field, the equipment will be fully operational, with back-hoes digging, hydro-mulchers spraying, mowers mowing, and so forth.

Technically-oriented Specialty Workshops will cover Interiorscape Contracting, Maintenance, Revegetation/Erosion Control, Public Relations and Insurance, and Lawn Care Workshop.

Full information and registration materials are available from: Associated Landscape Contractors of America; 1750 Old Meadow Road; McLean, Virginia 22102.

More than 200 companies will exhibit at the Georgia World Congress Center. The first GCSAA show was held at Detroit's Fort Shelby Hotel in 1928 where there were only 27 exhibitors.

PGA Hall of Fame inductee Gene Sarazen will be the keynote speaker. Educational themes will include The Way of Change, The Future of Water, Turf Management, Public Golf Course Management, Executive Appraisal, Conflict Management, and Applying Discoveries.

While superintendents tour Atlanta's finest golf courses, their wives can tour some of Atlanta's fine older homes or Stone Mountain Park.

Interested persons should contact GCSAA, 1617 St. Andrews Drive, Lawrence, KS 66044. Registration deadline is Jan. 6.

TURF

Research observed at Virginia field days

Approximately 280 turf professionals from 13 states were able to view the latest turf equipment, products and research at the 1978 Virginia Tech Turfgrass Field Days and Trade Show.

The two days of activity began at Lane Stadium with a tour of exhibits where 35 commercial businesses displayed turf products and equipment.

Participants then moved to Tech's Turfgrass Research Center to see



Richard E. Schmidt, associate professor of agronomy at Tech, demonstrates research on sub-irrigation of putting greens at the Virginia Tech Turfgrass Field Days and Trade Show. This method of irrigation has proven effective in conserving water and appears to have the potential of relieving dry spots on greens.

Solving irrigation and sprinkling problems takes a real Bird Brain.

For 45 years, the Rain Bird Brains have feathered the contractor's nest with everything he needs.

From trickle irrigation to automatic sprinkler systems. From pipe to fittings — even complete service facilities.

And plenty of sound advice.

So whether you're out on an irrigation limb, or just tired of squeaking by on a wing and a

prayer, give your local Rain Bird distributor a call.

He'll show you why, since 1933, the best solution to your irrigation and sprinkling problems has just been a matter of using our heads.

RAIN BIRD®
Bringing new ideas to life.

7045 N. Grand Avenue, Glendora, CA 91740

If you've got a problem only a Rain Bird Brain can solve, stop by any of these fine-feathered friends:

Eastern Franchise Turf Distributors

Indiana

DIXIE TURF & IRRIGATION,
13224 Lantern Rd., Noblesville,
IN 46060, (317) 842-4137

Kentucky

DIXIE IRRIGATION COMPANY,
4045 McCollum Ct., Louisville,
KY 40218, (502) 456-5630

Massachusetts

LARCHMONT ENGINEERING INC.,
11 Larchmont Ln., Lexington,
MA 02173, (617) 862-2550

Michigan

ADVANCE IRRIGATION SUPPLY CORP.,
10432 W. Michigan, Kalamazoo,
MI 49002, (616) 375-6599
CENTURY RAIN AID SUPPLY,
31691 Dequindre, Madison Heights,
MI 48071, (313) 588-2990

Also in Southfield

HUNTER-HUGHES, INC.,
1818-1838 Henry St., Muskegon,
MI 49441, (616) 755-2271

PARMENTER & ANDRE,
1042 Michigan Ave., NE, Grand Rapids,
MI 49503, (616) 458-1546

New Jersey

LEWIS W. BARTON CO.,
1260 Marlkrass Rd., Cherry Hill,
NJ 08003, (609) 429-6500

WILPAT ASSOCIATES, 39 Waverly Ave.,
Springfield, NJ 07081,
(201) 379-9313

New York

AGWAY, INC.,
P.O. Box 4853, Syracuse, NY 13221,
(315) 477-6346

EASTERN SPRINKLER SUPPLY CO.,
333 Baldwin, Hempstead, NY 11550,
(516) 486-7500

MAXWELL TURF, INC., 51 Village Ln.,
Hauppauge, NY 11787,
(516) 265-3580

NIAGARA ENTERPRISES, INC.,
4344 Connection Dr., Buffalo,
NY 14221, (716) 633-7352

Ohio

LAKE SHORE EQUIPMENT & SUPPLY,
300 S. Abbe Rd., Elyria, OH 44035,
(216) 323-7544

OLDFIELD EQUIPMENT CO.,
430 W. Seymour Ave., Cincinnati,
OH 45216, (513) 821-5582

Pennsylvania

EECO, INC.,
4021 N. 6th St., Harrisburg,
PA 17100, (717) 238-9424

KRIGGER & CO., INC.,
3025 Babcock Blvd., Pittsburgh,
PA 15237, (412) 931-2176

Virginia

FISHER IRRIGATION CORP.,
2514 Waco St., Richmond,
VA 23229, (804) 288-4139

TURF & GARDEN,
Division of Todd Co., Inc.
2012 Campostella Rd.,
Chesapeake, VA 23320,
(804) 543-2071

West Virginia

C.I. THORNBURG CO., INC.,
2837 Collis Ave., Huntington,
WV 25700, (304) 523-3484



© Rain Bird is a registered trademark of Rain Bird Sprinkler Mfg. Corp., Glendora, California

© 1978 Rain Bird Sprinkler Mfg. Corp.

UPDATE

Second member of cancer group quits

Dr. I. N. Dubin, professor of pathology at The Medical College of Pennsylvania, resigned his position on the Environmental Protection Agency's Carcinogen Assessment Group complaining of CAG's chairman's lack of respect for research findings and interpretations. Dubin was the second member of CAG to resign for this reason.

Cases mentioned by Dubin evidence that Endrin did not cause cancer in an FDA study which CAG Chairman Albert disagreed, and a case with tests for carcinogenicity of Dimilin.

Dubin said Albert's knowledge of pathology, "is so meager that he does not understand the general principles or what goes into making a histopathologic diagnosis."

Lignasan effectiveness questioned

A chemical registered for use against Dutch elm disease was ineffective in reducing disease development when used at recommended rates in tests at the U.S. Department of Agriculture's Nursery Crops Research Laboratory, Delaware, Ohio.

Dr. Lawrence R. Schreiber, plant pathologist and research leader, told the American Phytopathological Society here today that he tested the chemical, Lignasan BLP, on elm trees inoculated with two strains of Dutch elm disease.

One fungus strain had been developed that was tolerant to the chemical, and the other strain was sensitive to it. Neither strain was inhibited when the chemical was injected into diseased trees at the recommended dosage. When the dosage was increased to five times the recommended rate the sensitive fungus strain was inhibited, but the tolerant strain was not.

"These research results must be given serious consideration when Lignasan BLP treatment is considered," Schreiber said.

Aquatic weed research agreement signed

A new Memorandum of Understanding to strengthen cooperation in conducting research programs for the control of aquatic weeds in reservoirs, irrigation canals, and drains was signed recently by three federal agencies: the Bureau of Reclamation, the Fish and Wildlife Service, and the Science and Education Administration. The first two are part of the Department of the Interior; the latter, the Department of Agriculture.

Agriculture and Interior agencies have had cooperative research agreements on specific weed control studies since 1947, but the new agreement is broader and will enable the three agencies to conduct studies on problems of mutual interest.

Since enactment of the National Environmental Policy Act of 1969, it has been increasingly difficult to develop aquatic weed control technology that meets the safety standards of the three cooperating agencies and the Environmental Protection Agency.

Primary concerns expressed by agency officials were assistance to irrigators and other agricultural interests, protection of the environment, and efficient research to develop improved management systems to accomplish those objectives.

EPA grants expanded carbaryl label

One-gallon jugs of Sevimol 4 carbaryl insecticide, product of Union Carbide's Agricultural Products Division, have been granted an expanded registration by the Environmental Protection Agency. Shade trees and ornamentals have been added to the registration, along with cotton and certain vegetables and forage and field crops. Registration for the gallon size previously was limited to tobacco pest control.

research projects being conducted. Comparisons of herbicides, pesticides, fertilizers, irrigation systems, seed varieties and soil types were made by Tech faculty members.

A major highlight at the research stops was an experimental sub-irrigation golf putting green. The green is constructed like a conventional U.S. Golf Association green, except for the addition of water emitters installed on top of the gravel layer. Water is fed through the emitters and the moisture is distributed by capillary action.

"This system appears to be a promising method of supplying water uniformly to turf areas without having to saturate the surface soil, and of reducing soil aeration," John F. Shoulders, Virginia Tech Extension specialist in turf, said.

TURF

Florida turf managers explore coming era

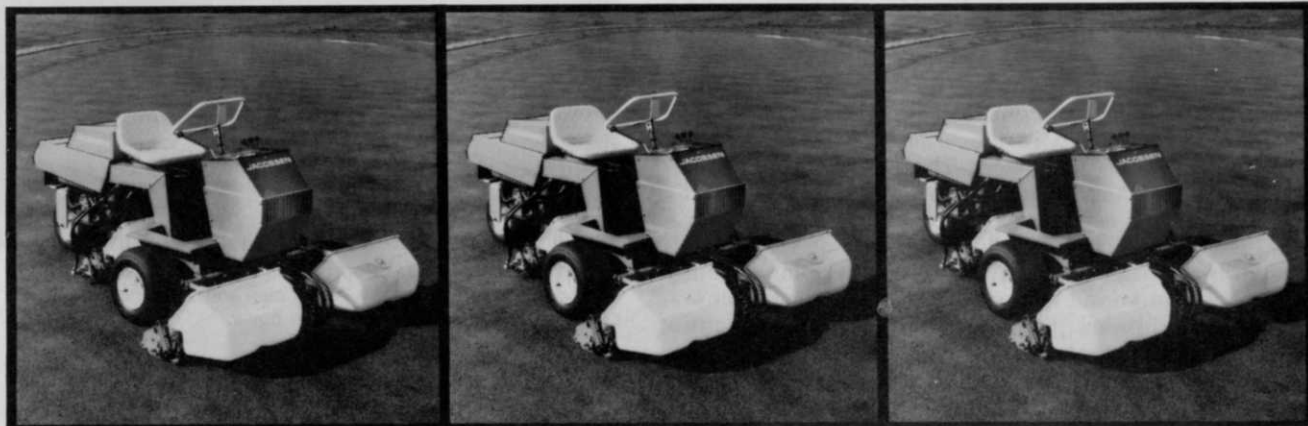
A broad and varied program of educational seminars and an exhibit area filled with 86 suppliers of seed, chemicals, and equipment drew 750 turf managers to the 26th annual conference and show of the Florida Turf-Grass Association in Orlando recently.

Dr. James B. Beard, professor of turfgrass physiology at Texas A&M University, discussed the university's turfgrass current research projects in his keynote address. "We're still a very young science in turfgrass," he noted, "but we're coming."

Research programs such as the one at Texas A&M are producing much valuable information on turfgrass science, but are not cheap. Dr. Beard outlined the costs of his university's 3-year-old program and came up with a total expenditure of \$686,000. That figure includes the value of much irrigation and laboratory equipment donated by manufacturers, as well as a building, a greenhouse, test plots, stress physiology laboratory, and other equipment.

"I see a new era on the horizon. EPA has weeded out the retired colonels and liberal arts graduates who were interpreting chemical labels they couldn't even read," said Dr. Richard L. Lipsey, pesticide chemical coordinator at the University of Florida during his talk on turf pesticides.

Win a Greens King!



3 lucky golf courses will win these brand new Jacobsen Greens Kings at the GCSAA show.

We're celebrating the 10th anniversary of the Greens King.

The performance and durability of this fine greens mower has given us a great deal of pride. And given our customers many years of service.

So we're searching for the three oldest operating Greens Kings we can find.

The golf courses who have these three oldest Greens Kings will be awarded brand new ones at the GCSAA show in February at Atlanta.

If you still use an older Greens King, you'll sure want to see if you can win a brand new one for your golf course.

How to Enter

Go look at your Greens King and write down its serial number. Send the serial number, the date of purchase, and the name of the Jacobsen distributor who sold it to you to:

Greens King
Jacobsen
1721 Packard Avenue
Racine, Wisconsin 53403

All entries must be received in Racine no later than January 15, 1979.

We'll then check our manufacturing records to

determine which are the three oldest Greens Kings.

The winners will be announced at the Jacobsen booth in the GCSAA International Turf Grass Conference in Atlanta.

Schedule of Awards to the Winners:

1st winner (Feb. 6, 2:00 PM)
2nd winner (Feb. 7, 2:00 PM)
3rd winner (Feb. 8, 11:00 AM)

Three lucky golf courses will be winners. Maybe yours is one of them.

JACOBSEN
TEXTRON

Jacobsen Division of Textron Inc.

FORT LAUDERDALE'S PLAN TO RESTORE TREE CANOPY

By Daniel J. Mackey

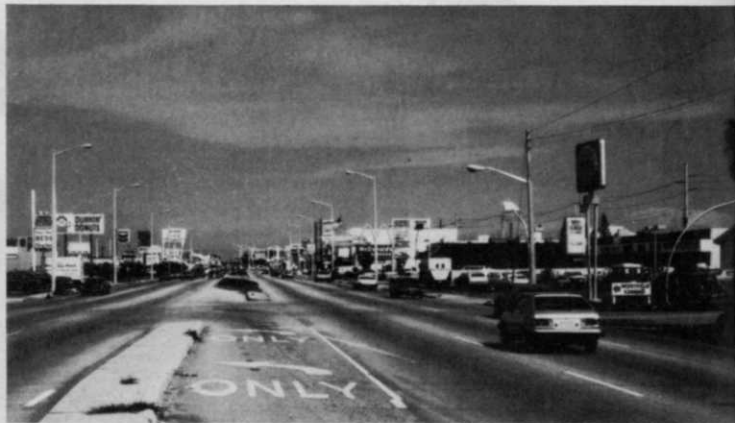
The fast developing city of Fort Lauderdale, Florida, has some unique urban tree problems which have evolved as the result of destructive building practices, and the lack of city canopy planning.

It all began a long time ago, when Fort Lauderdale, like the rest of the Florida east coast, was a twenty mile wide pine ridge with the Atlantic Ocean, beach, and marsh on the east, and the massive Everglades on the west. There were bald cypress, red maple, laurel oak, willows, red bay, and Carolina ash in the 37,000 acres of cypress swamp to the northwest. The Everglades were a vast wilderness of trees and native palms amidst clumps of seagrasses. Tropical hammocks, or "islands" of trees were composed of live oaks, strangler figs, and red maple trees. Upland hammocks contained native varieties like mastic, stopper sabal palm, pidgeon plum, poisonwood, satin leaf, gumbo limbo, wild lime, and paradise trees. Behind the beaches there were red, black, and white mangroves, seagrasses, and sea oats. On the coastal ridge, where most east coast Floridians now live, there were two types of pine forests. On upland, well drained, sandy soils stood the scrub pine forest accompanied by sand pine and scrub oak. The second type of forest on the Atlantic Coastal Ridge were pine flatwoods, made up of dense stands of slash pine towering over grasses, saw palmetto and gallberry. Until the turn of the century, Fort Lauderdale was primarily covered with these pine forests.

Coconut palms were confined to the beach and inland waterways. The coconuts were washed in from the Caribbean Islands and tropics to the south. The winds and tides brought them here, but the coconuts rarely had a chance to sprout new trees beyond the shore due to competition with native vegetation.

By the early 1900's loggers and pioneers had leveled much of the great forests, and the slow development of Florida continued. But even as early as ten years ago, Fort Lauderdale and other South Florida cities were still beautiful beyond description. Then came the unlimited growth which continues today, and with it came the practice of clearcutting all trees at building sites. Under this money-saving practice, no trees were spared by the bulldozer. The land was drained, the trees dragged away, and sometimes if lucky, a few exotics were plopped around the building or road.

Residents, shopkeepers, and city officials saw the majesty of the leaning coconut palms along the beach and rivers and decided the palms would look good on their property too. The Jamaican tall palm was especially seen as a drawing card for tourists. The cities planted these stately palms everywhere; on street medians, parks, school grounds, around public buildings, and beside roadways. A monoculture of palm trees was encouraged, therefore, and the image of Florida (as palm trees on a beach at sunset) would prove costly to South Florida's canopy cover.



Recent commercial development in Fort Lauderdale shows little concern for tree canopy. A new plan and ordinances have been created to restore native tree cover.

While houses, buildings, and roads were being built without regard to tree cover, a pilot program initiated by the Federal Forest Service began in Fort Lauderdale, in 1971. It was only the second of its kind in the United States — the quiet beginning of urban forestry. In 1973, the Florida Department of Agriculture and Consumers Services' Division of Forestry assigned the first of three subsequent foresters to Fort Lauderdale's public works department. The results of a canopy consensus of the entire city by the urban forester that year were shocking. Only 4.9% per cent of the city had canopy cover! The canopy cover still holds at that mark. In that same year, the new urban forester took a street survey and found the great majority of public landscaping was done with palm trees, although live oaks were also used. A more recent 1976 field survey taken in Broward County, (of which Fort Lauderdale is a part) showed that 94 percent of the original 104,000 acres of forest are gone. Therefore, only 2.5 percent of the entire county has tree cover — a meager 6,191 acres.

Coconut palms planted by the city, residents, and businesses, were a saving factor in providing at least minimal tree cover — until lethal yellowing hit. So called because the fronds turn a sickly yellow when infected with the disease, lethal yellowing was first discovered in Jamaica in 1933. It first became evident in the United States in 1955 at Key West. About 75 percent of the coconut palms on Key West island soon died, and the new blight to America quickly spread up the Florida Keys and onto the mainland. In 1974, it was estimated that Dade and Broward counties had 500,000 coconut palms. Today over 95 percent are dead, and the few remaining survivors are on borrowed time. The coconut palms on Fort Lauderdale's city property are injected with anti-biotics four times yearly to slow down the disease, and marked each time with a different color spray paint. This treatment, however, only postpones the inevitable, and researchers are still unable to find a lasting cure for the disease. But scientists from the University

of Florida's Institute of Food and Agricultural Sciences now think a quarter-inch tree insect called *Haplaxius* may be the carrier of the mysterious disease. Lethal yellowing also seems to be infecting other palms and tree species in South Florida in differing degrees. The Malayan Dwarf palm tree is highly resistant to the disease and is easily mistaken for the Jamaican palm, the appearance is so similar. This is why Malayan Dwarf palms are now being promoted as the Jamaican's replacement.

Lethal yellowing may be seen as a blessing in disguise someday, although the blight has further reduced the already inadequate canopy cover in Fort Lauderdale. Residents and city officials now realize the need for diversified planting of a mixture of tree types, so that when natural breaks do occur, there will be plenty of back-up vegetation to replace them. The day of monoculture planting in Fort Lauderdale is over. Now the stress is where it should be — on native varieties which are more suitable to the environment.

But coconut palms are not the only non-native exotic tree species which has usurped the rightful place of indigenous trees. The worst offenders are three junk trees which are invading at a rapid rate, years after their initial introduction. The Brazillian Pepper tree, locally called "holly tree," has become an urban weed tree in the city of Fort Lauderdale. It grows quickly on land disturbed by development, where its seeds are cultivated by the exposed soil. It is not uncommon to see wooded areas completely overcome by Brazillian Pepper trees, and see them growing out of sidewalks beside city buildings. Some birds, including the native mockingbird, love to feast on the red Brazillian Pepper seeds when ripe. But the seeds are also inadvertently dispersed by such birds throughout the city and countryside. The Pepper tree was introduced to Florida in the early 1900's because it is a fast grower which thrives near water, like all the non-desirable pest trees in South Florida.

The Australian Melaleuca tree was imported for many years as a specimen and lawn plant replacement for clearcut indigenous trees and plants. It was also widely used by the city as a street tree, and until very recently, its snowy blooms were of high ornamental value. The blooms extract a volatile odor which causes allergic reactions and respiratory problems in some people. The Malaleuca is another water glutton with roots which inhibit native vegetation growth. The magnificent Everglades are severely threatened by the Melaleuca's pervading presence. Melaleuca seed pods are large — about the size of an eraser — and contain many seeds. The seeds are dispersed by wind and birds and stay viable for a long time. Georgia Tech's Engineering Experiment Station is doing research on the uses of melaleuca wood by "pyrolyzing" it. Pyrolysis is the decomposition of solid organic waste through the action of heat in the absence of oxygen. Through the process, melaleuca wood is transformed into fuels like wood oil, char, and gas.

The third major pest tree thriving in Fort Lauderdale and other Florida towns, is the infamous Australian pine. These tall, brittle looking pines were initially introduced as windbreaks on



Malayan Dwarf palms planted recently next to an infected Jamaican Tall palm. Brazillian Pepper has taken over river bank below.



farms, cattle ranches, and roads. Some residents are concerned over the small forests of Australian pines quickly growing in the western portion of Fort Lauderdale. Others, who are glad of any tree cover no matter the source, look affectionately at the pines and attempt to save them from the ax, as in a controversial battle between citizens and Department of Transportation officials earlier this year. Florida state parks on the east coast seem to be fond of the soil-holding quality of Australian pines and use them widely, especially on beaches. They certainly give a "forest feeling" when grown together. The problem is, Australian pines are also, as one local editorial put it, "messy, short-lived, grow like weeds, and are not good habitat for native South Florida wildlife." Use of the trees on state roads thirty and forty years ago preceded the discovery that the pines mature at thirty years, and rot within from fungus and insects and topple in light winds. Australian pines require continual maintenance for this reason, and are less dangerous when cut back to hedge size. When the pines are totally cut down, within weeks, dozens of new trees sprout up around the stump.

Brazillian Pepper, Melaleuca, and Australian pine, were all introduced to South Florida because they grow well on sand ridges, are salt tolerant,



One stand of slash pine on Interstate 95. The Australian Melaleuca (below) was imported as a specimen tree but now is considered a pest tree.



and are fast growers. What early Floridians didn't realize, however, was that these same exotics would today threaten the very existence of their native flora.

Two city nurseries are crucial in the battle against exotic tree problems and the much needed reforestation of Fort Lauderdale. One nursery is twelve acres beneath the noisy electric power wires of a local utility company. The expansive nursery is in reality, a growing storage place for trees awaiting planting on public properties. Since the nursery is about fifteen years old, mostly palm trees grow there. Varieties which are resistant to lethal yellowing are also stored there after importation.

The primary city nursery is wedged between a busy Fort Lauderdale street and a corner of the beautifully maintained Lauderdale Memorial Park Cemetery. There are approximately thirty-five varieties of trees jam-packed into the diminutive

nursery, although according to manager Val Olszak, they will "cut it down to ten or twelve varieties in the future and emphasize hardwood species." Most of the trees are indigenous to Florida, although exotics are also present. All of them will one-day be planted to form the future urban canopy of Fort Lauderdale. They include European black olive trees, red cedar, mangroves, garcinia, silver buttonwood, oak, lychee, fan palms, cypress, Malayan palms, maple trees, green ash, tree hibiscus, gumbo limbo, tamarind, bottlebrush, oleanders, parkensonia trees, mahogeny, and benjamin trees.

The trees are bought from local nurseries and the Florida Division of Forestry, donated, grown from seed, or from cuttings. City officials would like to see the nurseries become self-sufficient within two years, but space and money are problems. The primary nursery has become so crowded in the past year, over 750 trees must be stored in concrete containers beyond the nursery grounds. The urban forester has been looking at from 100-150 acres of public land which could be used for growing purposes, but money is still an ever-present rebuff. Nearly everyone involved with reforestation, including Mayor E. Clay Shaw, (a former nurseryman) calls funding "a problem of priorities." Nursery manager Val Olszak sums up the frustration when he says, "working for any city, you've got to just keep doing your job as if nothing will change — that way you get the job done and sleep nights." The city's Park's and Recreation Division, which had a 1977-1978 budget of \$2.2 million, allocated \$45,000 for nursery operation and expenses, and \$60,000 for buying trees, while city crews from the Park's Department did all the planting. Mayor Shaw says the reforestation program, begun with the arrival of the first urban forester in the early 1970's, is beginning to pay off. He says "Fort Lauderdale has been planting 4,000 trees a year through various projects," but admits, "the city should accelerate its tree planting program and double its efforts."

Mike Moore, the present urban forester assigned to Fort Lauderdale by the Florida Division of Forestry, says Florida is one of the leaders in urban reforestation, and that "the urban projects in Jacksonville, then Fort Lauderdale, set the precedent; now other cities are creating their own forestry and landscaping divisions by using the state assigned foresters permanently on city pay — and this is a growing phenomenon." When one thinks of a forester, urban or rural, one imagines a man working outside. But Moore spends more time communicating what is needed to be done. As a state employee, Moore can do no more than explain problems and present viable solutions. It's the city's job to decide the best choices and act. His most important responsibility is to formulate continuing reforestation plans for the city. He explains he's now "working on a written overall program of reforestation with a greater emphasis on the city assisting in residential planting of swales and roads." Up until now, he says, "we've been chipping away at the canopy problem." The job is a big one. Moore estimates that if the city crews were to plant 500 trees on city property only, for the next 30 years, by the year 2028 the trees will have matured enough to give the minimum 35 percent urban

All the Best for 1979

BROUWER could help make 1979 more prosperous for you.
Write us for the whole story.



Gerry Brouwer
President



Lloyd Smith
Comptroller



Don Caple
Chief Engineer



Bill Gorham
Production Manager



Allan Collins
Mower Sales



Jack Bain
Harvester Sales

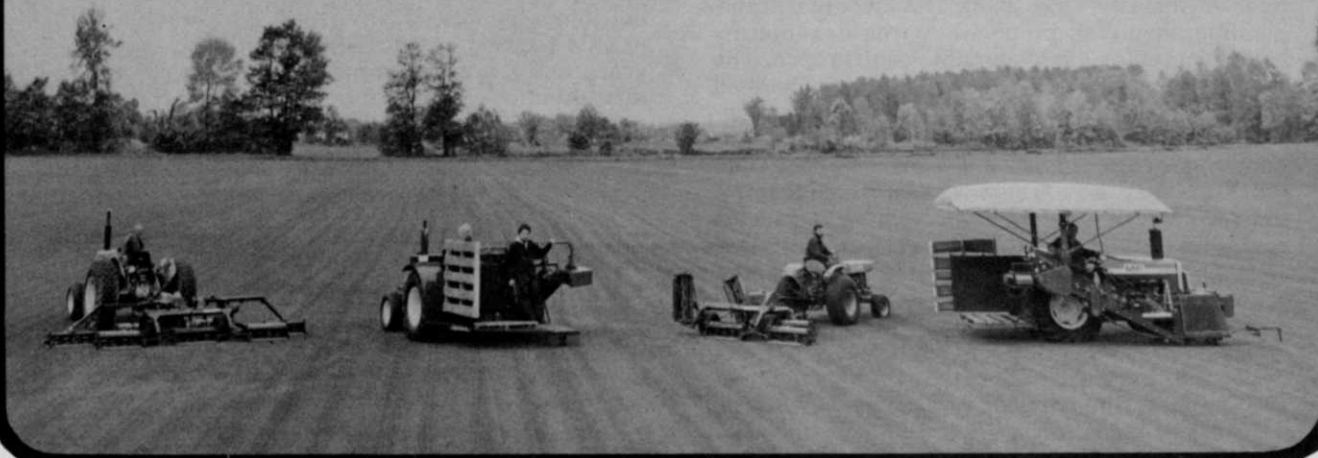


Ivan Day
Co-Ordinator

BROUWER TURF EQUIPMENT LIMITED

THE ULTIMATE IN RELIABILITY, VERSATILITY & ECONOMY

Manufacturer: Woodbine Avenue, Keswick, Ontario, Canada L4P 3C8 Telephone (416) 476-4311





Crowded main city nursery where more than 750 trees are planted in concrete containers.

canopy recommended to cut noise and air pollution, provide shade, and oxygen.

The city has been working with resident groups like homeowners associations, women's clubs, and civic improvement associations. The city usually gets involved when individuals or groups call the forester. Sometimes residents purchase the trees directly, or use the forester as a personal agent in purchasing the trees at a better price. Tree planting has become a popular project for neighborhoods as a result of this kind of assistance. Last year, for instance, a two-day plant sale in Fort Lauderdale drew 180,000 persons, and sold \$25 million worth of plants and trees! Moore believes this appreciation of flora and concern for the urban environment is vital if the reforestation is to succeed. Citizens also get involved by donating trees to the city "tree bank" for eventual transplanting on public property. A tree donation by homeowners is a tax deductible contribution. The city is also considering a program to save doomed trees from demolition sites to supply the nurseries.

Two laws have been instrumental in the evolution of Fort Lauderdale's loosely knit reforestation program. They are the cogs without which the program would fail. The Tree Preservation Ordinance is unique in the United States, and generally says all trees which are cut down must be replaced. The ordinance is aimed at builders, who are required to take out a \$5 permit to remove each tree, and then must replace it. When a builder removes a large tree, he must replace it with a number of smaller ones, which is good for the canopy because it generates more trees. When builders find they can't fit all the required number of small trees on

their development, they can donate the excess trees to the city and claim it as a tax deduction. This helps the small developers who find it financially difficult to build around large trees. Now they can build without high costs by simply replacing the old trees with new, smaller ones. The big developers, on the other hand, are finding it easier to retain the old, large trees, and this is also great for the urban canopy. Since the emphasis of the ordinance is on trees, not enforcement, violators are given the option of paying a stiff fine, the monetary value of the destroyed trees, or donating a predetermined number of trees to the city.

The second important law is called the New Parking Lot Ordinance. It was passed in response to the canopy problem, and the "concrete jungle" atmosphere created by hot, ugly, expansive parking lots with few, if any trees. Both public and private parking lots have been built this way for years, and this new ordinance is quickly changing that situation. Within five years all parking lot owners must comply with the ordinance by replacing up to 50 per cent of the land's original tree cover. As with the Tree Preservation Ordinance, a drive through the city is all that is needed to realize both laws are working. Fort Lauderdale is getting greener every day.

Meanwhile, reforestation of that part of Fort Lauderdale's beach commonly referred to as "The Strip" has begun in earnest, with mostly Malayan palms and a few Australian pine seedlings. Palms will be stressed only at "key tourist areas," like the beach, to retain the city's tropical image, according to forester Moore. Residential areas are being