

## **Gardner Becomes V.P.**

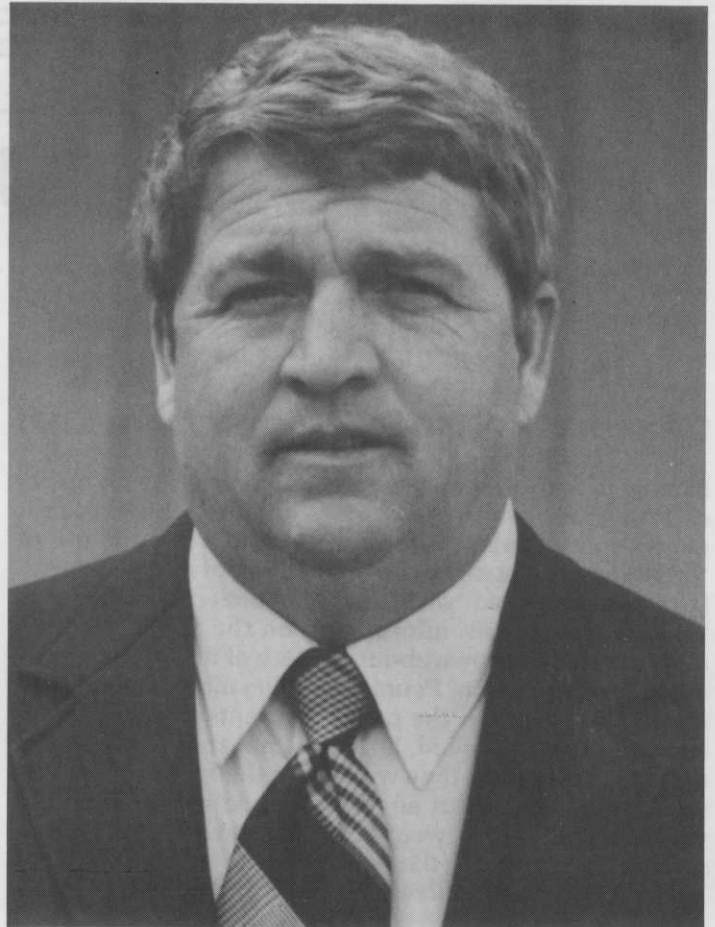
LESCO, Inc., Rocky River, OH, has named Phillip R. Gardner as a new vice president.

Gardner, who started with the company in 1976, works out of LESCO's Sebring, FL, facility. He has worked in LESCO's Florida operations since joining the company in 1976 as a LESCO salesman calling on golf courses with the first "warehouse-on-wheels."

In 1979 Gardner was named a regional sales manager for the southeastern United States. In January 1983 he was promoted to South East Regional Manager for all operations as well as regional sales.

Gardner is a 1961 graduate of Westerville High School. Before joining LESCO, he worked for eight years with Groezinger Golf Enterprises as golf course superintendent of Black Hawk and Minerva Lake Golf Courses near Columbus, OH.

A member of the Florida Turfgrass Association, the Southern Florida Golf Course Superintendents Association, the Palm Beach GCSA and the Florida Pest Control Association, Gardner now resides in Sebring. ■



*Phillip R. Gardner*

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# GOLF TURF NEWS

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## ***Gaseous Loss of Nitrogen from Turf***

Nitrogen is the most important nutrient for turfgrass culture in terms of how much is required, how often it needs to be applied, total cost, and the amount of "greening-up" caused by an application of nitrogen fertilizer as compared with other fertilizer applications. There is a wealth of information on the above parameters, but less is known about the fate of nitrogen fertilizers after application. People applying nitrogen fertilizer usually assume that the turfgrass plants take-up all the fertilizer that is applied. If there is not the usual "green-up" response, then they will blame the fertilizer for not working properly. But all fertilizers do indeed respond very predictably to weather, soil, and cultural conditions. Understanding the possible fates after application is key to making fertilizers efficient and maximizing the response.

We have been primarily concerned in Florida with the loss of nitrogen fertilizers by leaching because of the sand soils with low cation exchange capacity, high rainfall, and excessive irrigation. Research at the Ft. Lauderdale R.E.C. has shown that these conditions favorable for nitrogen leaching combined with the use of nitrate nitrogen fertilizers can lead to potentially large amounts of fertilizer losses (up to 60% of that applied).

However, everyone should be aware that potentially large gaseous losses into the atmosphere of applied nitrogen fertilizers can occur. Under certain conditions in Florida, gaseous losses can be as significant as leaching losses. One of the processes of gaseous losses of fertilizers is volatilization.

Volatilization is the loss into the atmosphere of ammonia ( $\text{NH}_3$ ) as a gas. It can occur with any ammoniacal fertilizer materials, such as ammonium sulfate or ammonium nitrate, when the soil pH is above 7.5. Under these conditions as much as one-third of the amount of fertilizer applied can be lost into the atmosphere. Very little ammonia (1%) is lost from these materials when the soils are acid.

The greatest concern with ammonia volatilization is with urea fertilizer, because of the large amount of gaseous losses under varying conditions. Urea is the alkaline form of ammonia. It is readily converted to ammonium carbonate by an enzyme called "urease." This enzyme is present wherever there is microbial activity, such as on leaves, or in thatch and soil. The ammonium carbonate is an unstable chemical form and ammonia is readily

released into the atmosphere. Urea fertilizers are usually broken down within 3 days of application.

Field tests on turf have shown ammonia volatilization losses to average 20-30% after an urea fertilizer application. When urea was applied to bare acid sand soils, the volatile losses were up to 59% of the urea applied. The higher the soil pH, the greater were the losses. The study also showed that by increasing soil moisture and temperatures ammonia losses were also increased. It was interesting to note that these studies showed about 95% of the volatile losses occurred within 7 days of application.

A recent laboratory study examined the differences in ammonia volatilization from urea applied as either a granular or a liquid. Ammonia losses from granular urea ranged from 1 to 55% of that applied, whereas ammonia losses from liquid urea were 2-26% of the urea applied. The actual losses depended upon the temperature and relative humidity conditions in the experiment. Increasing temperature and humidity generally increased the losses observed. Periodic wetting and drying of the turf caused surges of ammonia losses. Irrigation immediately after fertilization by either method of urea application significantly reduced volatilization to minor losses.

To obtain the maximum fertilizer efficiency (greatest turf response), the turf manager must carefully plan and implement a fertilizer program. Fertilizers should be applied to turf that has soil moisture near field capacity. This will help minimize potential leaching. The proper fertilizer source should be selected for the particular turf situation. If one is using urea fertilizers, the above research information indicates it is essential to water-in the fertilizer to minimize volatilization losses. Likewise, other nitrogen fertilizer sources will also benefit from being washed into the soil, not only to reduced volatilization, but also to get the fertilizer into the soil for root uptake. An application of a  $\frac{1}{8}$  to  $\frac{1}{4}$  inch of water is sufficient to wash the fertilizer into the thatch and soil. This should be done as soon as possible after fertilizer application. Using these techniques, a turf manager can make the most efficient use of fertilizer applications.

References: 1) Tito, S., J.R. Street, and T.J. Logan. 1984. Factors affecting ammonia volatilization from urea applied to turfgrass in a laboratory study. Proc. Amer. Soc. Agron. p.155. 2) Volk, G.M. 1959. Volatile loss of ammonia following surface application of urea to turf or bare soils. Agron. J. 51:746-749. ■

## LESCO Truck Territories

Five new LESCO Truck territories are being added by the company for 1985. With this expansion, LESCO Trucks will now serve golf courses on both coasts.

With the 1985 season, LESCO Trucks will be calling on courses in the Hartford, CT, area; the Florida panhandle and in New Orleans. Beginning in Spring 1985, LESCO, Inc., will initiate truck routes in Palm Springs and San Diego, California.

With the addition of the five new territories, a total of 32 LESCO Trucks will serve over 4,000 golf courses nationwide.

LESCO Trucks began serving turf managers in 1976 in Florida. The warehouse-on-wheels takes the LESCO salesman on a regular route to scheduled stops to serve the special needs of golf course accounts. Customers are notified in advance so they can plan orders and take advantage of monthly specials and sales.

LESCO, Inc., 20005 Lake Road, Rocky River, OH, Vice President Herb Cole believes the geographic expansion will have great advantage for customers in the new territories. "All those courses in the new areas we have been serving on a mail-order basis will now have the convenience and the service of buying material directly off the truck from a salesman trained to make recommendations for a particular area. The customer gains a 'store to his door' and a turf consultant.

In addition to the five new trucks, LESCO also serves courses in Florida, Michigan, New York, Maryland, Pennsylvania, the Carolinas, Illinois, Indiana, Ohio, the Hudson Valley, Kentucky, Wisconsin, Texas and Arizona.

The LESCO Truck maintains a complete line of golf course accessories, replacement parts, irrigation supplies, chemicals, fertilizers and seed. Large orders of seed, chemicals and fertilizer placed through the truck salesman are shipped directly from the warehouse.

LESCO, Inc., a manufacturer and distributor of turf-grass and horticulture equipment and supplies, is headquartered in Rocky River, OH and supplies over 16,000 customers nationwide. ■



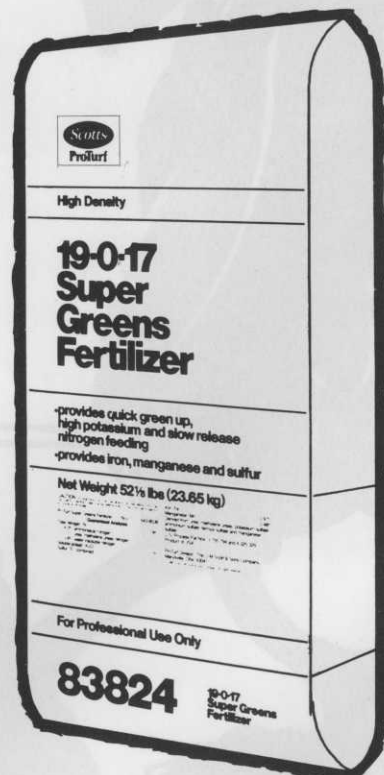
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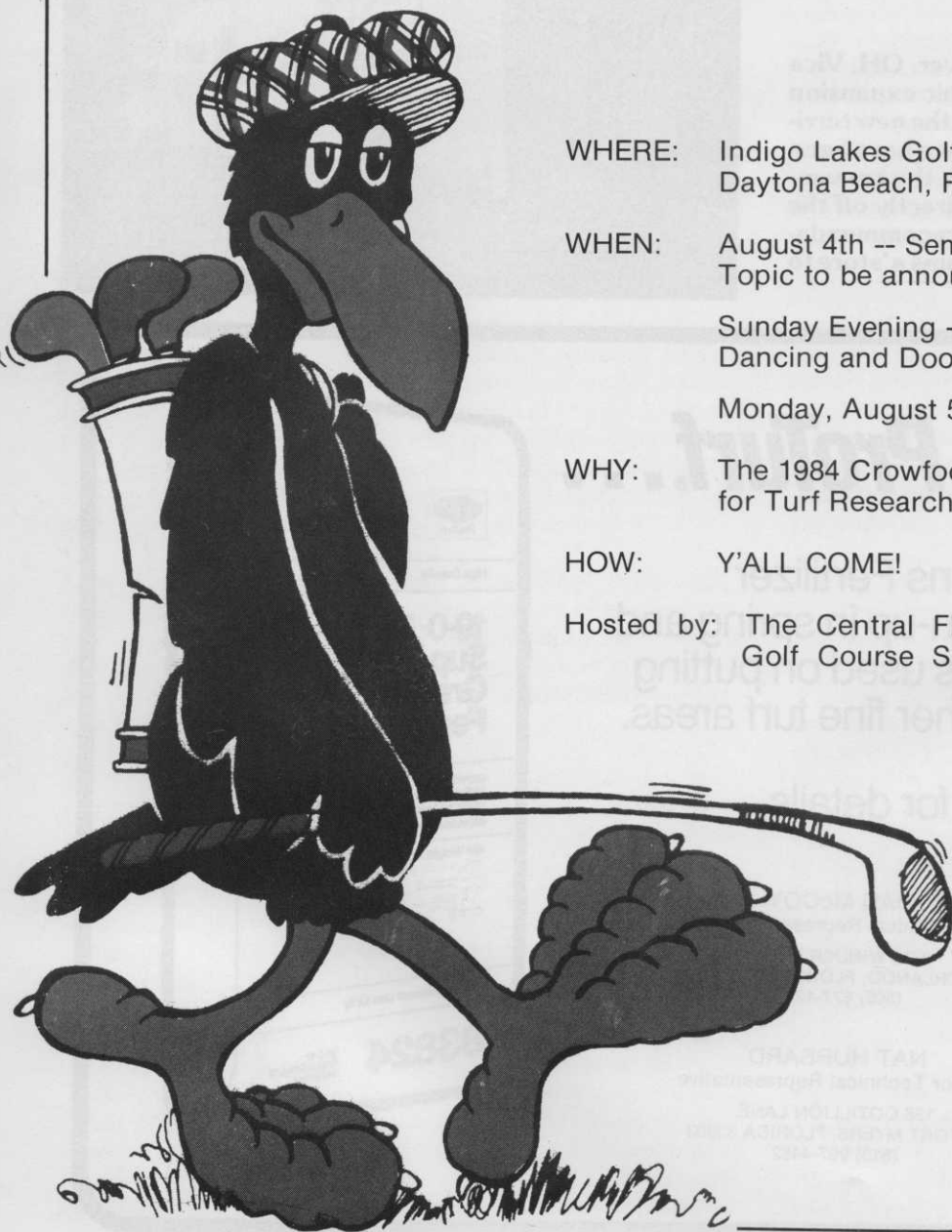




# COMING SOON!

# THE NINTH ANNUAL

# CROWFOOT OPEN!



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**WHEN:** August 4th -- Seminar (CEU credit).  
Topic to be announced.

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**WHY:** The 1984 Crowfoot Open raised \$3,000.00  
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**HOW:** Y'ALL COME!

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- Turf Disease Identification
- Computer Use in Turf Management

### EDUCATIONAL SESSIONS

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- Aerification
- The Successful Superintendent
- Nematode Update
- Putting Green Speed Update

### Lawn Care & Grounds Maintenance

- Selection of Landscape Plants
- Design of Landscape Plantings
- Calibrating Spreaders
- Pesticide & Fertilizer Compatibility
- Hiring and Retaining Personnel

### Basic Principles of Turf Culture

- Selection & Establishment
- Mowing, Fertilizing & Irrigation
- Troubleshooting Problems
- Biological & Chemical Aquatic Weed Control

### Advanced Principles of Turf Culture

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- Mode of Action of Insecticides
- Mode of Action of Herbicides
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## **Hector Donates Equipment to IFAS**

The Ft. Lauderdale Research and Education Center has recently received a gift of a Toro Series IV Greensmower and a Ryan RideAire from Hector Turf Incorporated of Miami. Thanks to the generosity of James Mantey and Ralph Baxter of Hector, the Research Center is able to utilize the latest turf equipment in its research programs. This donation is part of an ongoing effort by the Research Center to obtain turf equipment to keep its research programs current with the latest technology available to the turf industry.

The Toro greens mower from Hector will be used on new golf green research plots of Tifdwarf, Tifgreen, and Tifgreen II recently established at the Research Center. Plans for using the Ryan RideAire already include aerification of numerous turf areas of the Research Center including field plots of bermudagrass, St. Augustinegrass and bahiagrass. ■

## **READY TO DEMONSTRATE?**

Nine people were found guilty of obstructive demonstrating at the Three Mile Island nuclear plant. Their attorney said they acted to prevent "the enormity of danger which they reasonably believed we all faced" from the plant.

At about the same time, the Consumer Products Safety Commission revealed a *real* danger to us all: Some 8,000 people wind up in hospital rooms each year with toothpick-related injuries. At least three toothpick deaths have been reported from swallowing the deadly wooden slivers — just about three more than the total power plant casualties.

When, oh when, will we have an anti-toothpick demonstration?

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Enough hope to keep you happy;  
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Enough friends to give you comfort;  
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\*SUBSIDIARY OF SUNCOAST SALES SPECIALTY PRODUCT, INC.



# Tampa: Ideal City for FTGA Conference & Show

By: Irene Jones

Tampa...the hub city of Florida's West Coast...a picturesque vacationland and a bustling megatrend city will host The 1985 Florida Turf-Grass Association Conference and Show at The Curtis Hixon Convention Center and the Hyatt Regency Hotel, on September 29 - October 2, 1985. The show promises to be the best ever with increased educational sessions, the introduction of "hands on" workshop sessions and very qualified speakers.

The new "hands on" workshop sessions are designed to provide a practical, every-day approach to the subject covered. Three workshops are planned. They include:

**ESTIMATING LANDSCAPE INSTALLATION AND MAINTENANCE COSTS.** Conducted by Ms. Kathy Kerr of Kerr and Associates, Minneapolis, Mn. This workshop is designed to provide up-to-date information on how to effectively determine costs. The workshop will help you avoid making costly mistakes, help improve making projections, and improve profit margins.

**TURF DISEASE IDENTIFICATION AND CONTROL.** Conducted by Dr. Gary Simone and Mr. Richard Cullen, this workshop will provide the participant with everything necessary to accurately diagnose the common diseases that afflict southern turf. Microscopes will be provided to help appreciate, and reinforce what is needed to make sound decisions when accurate disease identification is vital.

**COMPUTER USE IN TURF MANAGEMENT** is designed to help a turf manager make his or her job easier. Turfgrass management is more than just agronomics. It also combines making sound business decisions, knowing how to budget, make projections, and keep various records regarding financial and equipment matters. These workshops, conducted by Dr. Fedro Zazueta and Ms. Justine Wellington from IFAS, in Gainesville will provide the answers needed to run an efficient, profitable operation.

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*Curtis Hixon Convention Center.*



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The workshops will be conducted for 3 days. Enrollment will be limited to 24 individuals in each workshop. Enrollment is on a first come, first serve basis with priority given to FTGA members. More information will be released shortly regarding these workshops and the Conference and Show.

Dan and I plan to attend the show this year. We always enjoy visiting the Tampa/St. Petersburg area because growing up my family home was located on Treasure Island over on the St. Petersburg side of Tampa Bay. Tampa and St. Petersburg are separated by a large body of water, the Tampa Bay. Memories of that time in my life include visiting cigar factories in Ybor City, Tampa's Latin Quarter with my Uncle. The cigar industry was the catalyst that created Ybor City when cigar makers migrated from Havana to Key West and then to Ybor City in 1885. My Uncle Paul, a retired policeman from Pennsylvania, came down twice a year and we visited the cigar factories looking over "seconds." Seconds were top quality cigars hand rolled from Cuban tobacco leaves but the price of those cigars was greatly reduced because of flaws in the leaves. Uncle Paul would buy them and repair the air holes by rewrapping the damaged parts. Fine cigars are still rolled by hand by practitioners of this fading craft.

Tampa is well known for its industry, factories, commerce and world trade. Recognized as a major port for both cruise ship lines and barge traffic as well as for its "Pink Gold," Tampa is the home of one of the world's large shrimp fleets. About a dozen of these trawlers are usually in port. And, the Tampa Port Authority wants three downtown docks for cruise ships built sometime between 1987 and 1988, according to Frank Clewis, marketing director. On the 20-acre tract, the authority also wants to arrange for development of 1.5 million square feet of space in two office towers and two hotels with 600 rooms each.

If you are flying in for the Conference you will enjoy a "Five Star Airport" because Tampa International Airport is rated by many, including Esquire and Fortune Magazines, as the finest airport in the world. In addition to being beautiful and efficient, the flight departures are reported to be 99.6% reliable.

The annual FTGA Scholarship & Research Golf Tournament will start things off for the Conference. The tourna-



Ybor Square in Ybor City.

ment will be held at the Sun City Center Golf Course on The Lakes, The Oaks and The Palms which all together include 27 beautiful holes. Dan Morgan, CGCS is the Superintendent, Dan has put in a lot of hard work to coordinate this major event. Tournament monies will support turf-grass scholarship and research. Following the tournament, it's off to Simmons Ranch for a Ruskin Corn Boil and Steak Fry. Since the tournament is open to everyone, even if you don't play golf you can cheer on those who do. The corn boil is a must because you will meet old friends and make some new ones. Superintendents should plan to support this event.

FTGA funded research presentations will start the General Sessions on Monday afternoon, September 30. Topics to be covered include: Bermudagrass Decline, Salinity Studies, Nematode Research, and Overseeding Trials. FTGA lobbyist, Joe Fuller, will update attendees on legislative action affecting turf interests.

A highlight at this year's Conference and Show will be the featured speaker, Art Holst. Mr. Holst is a former NFL official with the ability to motivate, entertain, and challenge his audience. His talk, the "Challenge of Excellence" promises to leave us all with a very strong message.

Educational sessions this year have been expanded to four. They include: GOLF TURF, LAWN CARE AND GROUNDS MAINTENANCE, BASIC PRINCIPLES OF TURF CULTURE AND ADVANCED PRINCIPLES OF TURF CULTURE. In addition, HRS credits will be awarded for several of the Basic and Advanced Principle Sessions. The following is a summary of the educational sessions for Tuesday, October 1, 1985:

#### GOLF TURF SESSION:

Golfing Trends in Florida — Dr. Joe Beditz, National Golf Foundation.

Golf Course Aerification — Dr. Robert Carrow, Georgia Agricultural Experiment Station.

What Makes a Golf Course Superintendent Successful — Gene Baston, President of G.C.S.A.A.

Putting Green Speed Update - Dr. Joe Duich, Pennsylvania State University.

Preventing Fires in the Maintenance Facility — Todd

(continued on page 59)



Downtown Tampa.



(continued from page 58)

Spear, Public Education Officer, Tampa Fire Department.

How Long Can You Mow Greens — Charles "Bud" White, United States Golf Association.

#### LAWN CARE AND GROUNDS MAINTENANCE:

Selecting Quality Landscape Plants — James Salmon, Salmon's Wholesale Nursery, Ocala.

Design of Landscape Plantings — John Piersol, Lake City Community College, Lake City.

Maintenance of Landscape Plantings — John Aoki, Aoki Landscaping & Maintenance, Tampa.

Calibrating Centrifugal Spreaders — Art Wick, Lesco, Inc. Rocky River, Ohio.

Hiring and Retaining Personnel — Dr. G.C. Nutter, Sunburst Ridge Farm, Buford, Georgia.

Compatibility of Pesticide and Fertilizer Combinations — Dr. Charles Darrah, ChemLawn Services Corp., Columbus, Ohio.

#### BASIC PRINCIPLES OF TURF CULTURE:

Fundamentals I. Turf Selections and Establishment — Harold Jones, Duval Co. Cooperative Extension, Jacksonville.

Fundamentals II. Turf Mowing, Fertility, and Irrigation — David Lambert, Charlotte Co. Cooperative Extension, Punta Gorda.

Fundamentals III. Trouble Shooting Turf Problems — Bob Rehberg, Estech, Inc., Winter Haven.

Fundamentals IV. Biological and Chemical Aquatic Weed Control — Dr. Vernon Vandiver, University of Florida, IFAS, Ft. Lauderdale.

#### ADVANCED PRINCIPLES OF TURF CULTURE:

Turfgrass Growth and Development — Dr. Jeffrey Krans, Mississippi State University, Mississippi.

Selecting Equipment for Turf Maintenance — Frank Buckingham, Equipment Consultant, Springfield, Missouri.

Insecticide Mode of Action — Dr. James Reinert, Texas Agricultural Experiment Station, Dallas.

Herbicide Mode of Action — B.J. Johnson, Georgia Agricultural Experiment Station, Experiment.

A giant new convention center is also targeted for completion in Tampa in 1987. The center will be among the nation's largest, with 200,000 square feet set aside just for an exhibit hall. Proposals for the project are currently under review. This new center would be available for future Golf Course and Turf-Grass conventions.

Some families may want to plan to visit Busch Gardens where Africa of old comes to life. The adventure and romanticism of exotic Africa, The Dark Continent...celebrated its 25th anniversary in 1984, here you will find seven distinctly themed African sections complete with wild jungle animals, wilder thrill rides, colorful open-air bazaars and authentic foods. Lush gardens, exotic birds and the famed Bird Circus, with trained macaws and cockatoos, are still among the most popular park attraction. Located at 3000 Busch Boulevard, two miles east of Interstate 275, Busch Gardens is open daily from 9:30 A.M. to 6:00 P.M., with extended hours in the summer. The single admission price of \$13.50 includes all rides, shows and attractions. Children two years and under are admitted free. Parking is \$1 per vehicle.

For me the flavor and color of Tampa's Latin American Heritage expresses itself in the dining cuisine of The Columbia Restaurant in Ybor City. Black Bean Soup (the world's best), chicken and rice, flan and strong sweet coffee served in a courtyard filled with the music and rhythm of Spanish Dancers and you're on your way to creating a memorable evening. Two years ago Dan and I enjoyed one such evening with Max and Sally Brown. How about if we plan it again this year?

The final day provides a grand finale to a successful Conference and Show. General sessions on Wednesday, October 2 are designed to be controversial, provocative and enlightening. Victoria Tschinkel, Secretary, Department of Environmental Regulation will discuss the DER and how it affects sensitive issues regarding water quality, protection of ground water, and other problems important to the turf industry. Dr. D.L. Shankland, Chairman of the Department of Entomology and Nematology will discuss "Environmental Toxicants and Public Risks in Florida." His discussion will clarify some of the perceived risks as compared to the actual risks of using chemicals. Many of the chemicals we're exposed to on an every day basis right in the home are far more toxic and dangerous than are the chemicals used in agriculture. Dr. Shankland will compare these risks and illustrate how all these risks need to be outweighed.

Dr. J.M. Davidson, Assistant Dean of Research at IFAS will discuss the "Role of IFAS in Evaluation and Recommendation of Pesticides." He will discuss the testing and recommendation procedures that IFAS goes through in their process of making recommendations. This is an important talk not to be missed since we must now reevaluate many factors before a recommendation can be made especially as a result of increased pesticide awareness and contamination of ground water supplies.

Finally, Drs. Bruce Augustin and Charles Peacock will discuss the latest in insect, disease, nematodes, and weed controls. Their presentation will provide the latest information available for controlling these pests.

The 1985 Conference and Show promises to surpass all others in the past. Be sure to plan now for this grand event to be held September 29 through October 2, 1985 in Tampa, Florida. For more information contact the Florida Turf-Grass Association, 302 S. Graham Ave., Orlando, Florida 32803-6322, Telephone: (305) 898-6721. ■

# Editorial

The annual Florida Turf-Grass Association Conference and Show is fast becoming "The Show" in The Southeastern United States. People are registered from as far away as Hawaii. This show should be especially appealing for any turf professional who can not attend a national conference.

With 2,000 registrants, 130 booths, 4 separate simultaneous sessions, and the very best speakers from throughout the USA this promises to be a blockbuster affair.

Can you as Greens Chairman, Owner or General Manager afford not to send your Golf Course Superintendent to this once a year educational update of what is working best on Florida Golf Courses? The absence of this kind of knowledge could cost your golf operation thousands of dollars.

Can you as a Golf Course Superintendent afford not to give your golf course the latest technology and management technique? Do you care about your future and the future of your profession? Make arrangements now to meet with your fellow professionals September 29 to October 2, 1985 in Tampa, Florida.

For registration material contact Bill Nass at FTGA headquarters in Orlando, phone number: (305) 898-6721. ■