## Full Maintenance Range Covered in Florida Meet

By RALPH W. WHITE, JR.

Fourth annual University of Florida Turf Grass management conference co-sponsored by the Florida Turf Association and the Agricultural Divisions of the University of Florida opened with a tour of campus turf sites.

The tour included the new Ormond bermudagrass planting at the Student Service Center, Emerald Zoysia in the new sorority area, Tilflawn bermuda on the drill field and bahiagrass on athletic fields and the pitch and putt course in the women's recreation area.

The first afternoon's educational ses-

agronomist of the Experiment Station chose "Moisture and Plant Growth" as his subject; and Jack Kolb of Toro Manufacturing Corp., discussed "The Role of Plant Nutrients".

### Equipment Discussed

Following the annual meeting of the Florida Turf Assn., a forum was held on tool and equipment maintenance. Marvin Elsted of Toro emphasized that good housekeeping is the most important factor in getting satisfactory results from and prolonging the life of machinery. He added that equipment storage areas should be kept clean and equipped for repair work and that operators should be thoroughly trained in operating various machines. Following showing of the General Motors film, "The ABC's of Lubrication," the remainder of the session was devoted to a panel of engine maintenance.



Gene C. Nutter (on truck) discusses fertilization and vertical mowing of new experimental green. The green is planted in five varieties of improved Bermuda-grass.

sion was entitled "Fundamentals of Turf Grass Production."

Gene C. Nutter, asst. turf technologist at the University, discussed: "What Is A Grass Plant". He compared turf grass production with production of a giant industrial plant. The actual grass plant he said represents the physical plant with photosynthesis and respiration as processes of the assembly line. Soil and roots represent the storage reservoir and the supply line, while moisture and nutrients are considered raw materials. The superintendent, he stated, is considered the industrial engineer of the plant. Nutter was followed by Ralph W. White, Jr., graduate asst, in turf, who discussed "How Grass Produces Food"; Alan Witherspoon, agronomist, spoke on "The Development and Function of the Root System"; Thomas J. Sheehan, asst. ornamental horticulturist, Florida Agriculture Experiment Station, discussed "Simplified Soil Chemistry"; Darell M. McCloud, assoc.

On the second day, turf subjects and other topics were covered. Col. Frank Ward, Bradenton CG supt., said that the electric golf car has brought new problems to all operating departments, but added that the supt, can still keep turf in good condition if officials are made to recognize that car use results in increased turf maintenance cost.

#### Design for Economy

"Trends in Golf Course Design" were discussed by Robert Bruce Harris, the architect. Streamlining design of tees, fairways, sandtraps and putting greens for easier and more economical maintenance with power equipment will result in a functional and more beautiful golf course, he said.

A four man panel discussed aspects of tournament preparation. Lou Bateman, prosupt., Ocala G&CC cited what the golfer looks for and expects when he participates in a tournament. Irving E. Schloss, Mgr., PGA National Golf Club, Dunedin, Florida, discussed the role of tournament chmn. He stated the tournament chairman is co-ordinator of all the committees, and that for a successful

tournament, he must plan thoroughly well in advance. Robert Duguid, supt., Timequana CC, Jacksonville, discussed the supt's role in tournament preparation. He suggested that final preparations for the tournament should begin about a month before it starts and should continue until the day before the tournament begins when new or repainted tees, markers, flags and flag poles should be set out. Golf course greens particularly should be in top shape. Edward Stephens, dist. chmn. of State Golf Assn. completed the panel by discussing the role of his organization in tournament planning. He stated that it is a regulatory and advisory group.

#### Airs Resort Problems

Following the panel, T. M. Baumgardner, Sea Island, (Ga.) Corp. spoke on the problems of resort golf operation. He cited overcrowding as the main problem of resort areas and suggested ways of making the golfer happy and keeping the resort golfer coming back every week. Some problems peculiar to resort courses according to Baumgardner, are: (1) play during the season is heavy seven days a week; (2) vacationers resent regimentation: (3) occurrences that disturb play should be carefully guarded against.

One of the highlights of the conference was the tour of the turf research nurseries. The tour included variety adaptation studies, progation studies, date of planting studies, fertility experiments, soil sterilization studies, lawn management studies, nematode investigations, disease investigations, meteorlogical and automatic irrigation demonstrations.

It was revealed that a turf disease research program is now underway at the University experiment station. It is being headed by T. E. Freeman, who joined the staff as pathologist this past spring. One of his first duties will be to survey the diseases of economic importance in Florida.

E. C. Burt, asst. agronomist at the Experiment Station, next discussed newly developed temporary soil sterilants which show promise in controlling weeds in newly sprigged turf. Gil Whitton, research asst. in turf, Experiment Station, followed and discussed the most common nematodes on turf in Florida.

Following adjournment of the conference, the newly elected board of the Florida Turf Assoc, had its first meeting. The board includes:

Gol. Frank Ward, Bradenton CG,; pres; Henry C. Martin, Florida State University, vp; and James L. Blackledge, secy-treas.

Directors are:

Ralph P. Harper, Lloyd M. Clifton, Sidney Kirkpatrick, Robert L. Perry, Robert Duguid and Steve M. Haft, Jr.

## Minnesota Conference

The annual conference of the Minnesota GCSA will be held at the Curtis Hotel, Minneapolis, Feb. 27-28 and Mar. 1.

# Supt's Value to Club Discussed at Midwest Conference

Speeches by Charles Wilson, Milwaukee Sewerage Commission, William Daniel, Purdue University agronomist, C. E. (Scotty) Stewart, irrigation engineer, Paul Burdett, Lombard, Ill., supt., and Charles N. Eckstein of Chicago Dist. Golf Assn., plus a lively discussion of the supt's monetary requirements, were highlights of the Midwest Assoc, of Golf Course Supts, clinic at Olympia fields (Ill.) CC in November. Gordon Brinkworth, Olympia supt., assisted by Robert W. Williams, Midwest pres., directed the two-day production.

Wilson gave a very lucid summary of the progress made in greenkeeping in the last 10 years, emphasizing that cooperation of researchers and manufacturers with the supts, has brought almost unbelievable advances in the art of course management during that time. Purdue's many research undertakings were explained by Bill Daniel who supplemented his informative speech with an extensive catalog of slide films.

Scotty Stewart, describing the problems faced in installing an irrigation system on the many playing fields of the new Air Force Academy, passed on to the supts, a much needed formula for determining the efficiency of their sprinkling systems. Burdett's contribution was a humorous treatment of his battle with the nematodes, while Charley Eckstein, one of golf's most devoted ambassadors, outlined his ideas of what the average player looks for in a course.

Discussion of the supt's economic picture climaxed the two-day meeting. Practically every supt, attending the clinic, and there were more than 100, got in on this open forum debate. Thirteen factors for determining the supt's worth to his club were agreed upon. However, it was strongly stressed that only continuing individual and group educational programs will help the supt, to improve his bargaining position.

Educational reports, association members' own investigation of various turf problems and discussions of machinery maintenance and uses also were on the Midwest program,

Keep These Dates Open! February 10-15 National Turfgrass Conference Kentucky Hotel, Louisville