

creased and improvements in soil structure of greens is thus anticipated. Watering practices have been given considerable attention and this phase of maintenance, in many instances, has brought desirable results; the aerating of greens and fairways has been inaugurated in many new cases and in some instances has been made a regular practice.

With their new freedom to purchase materials and equipment that they have long needed and wanted, not only are the greenskeepers in this district pleased but there is allowance for a self educational process that is indeed interesting. Everything that is done is not correct, but with the opportunity to try new practices and procedures that have long been considered and heretofore been impossible, they are learning a great deal about turf control.

We have in the middle west, we believe, an outstanding group of greenskeepers and golf superintendents. Their attitude toward their profession is an unselfish one and for this reason primarily, we believe that they are superior in their profession to any group engaged in similar occupations. We would put the greenkeepers of the Heart of America district up against any group in the country.

We expect to see a great deal more progress in the direction of player satisfaction due to improved green and fairway turf in the next five years resulting from this opportunity of the greenskeepers to buy what they need and their very aggressive and cooperative attitude toward the challenge facing them. Although machinery has been very difficult to secure, it has been secured and is in use by many of the leading institutions and the results are indeed gratifying.

## **COURSE DEVELOPMENT IN FLORIDA**

By James L. Blackledge,

Island Landscape Co., Palm Beach, Fla.

### **EQUIPMENT USE:**

1. The following have adopted high-speed air-field type gang mowers for mowing roughs:

O. S. Baker, Indian Creek Country Club, Miami Beach

Gene Tift, Bayshore Golf Club, Miami Beach

C. C. Kelly, Miami Shores Golf Club, Miami Shores

Robert Cribbett, Lakewood Country Club, St. Petersburg

2. Despite a long standing prejudice against the use of power mowers on winter grass greens, there is a gradual and general change to power mowers in progress as a result of improved power mowers and a better understanding of the causes of troubles on winter grass greens.

3. O. S. Baker, Indian Creek Country Club, is doing exceptional work with the F. G. Aerifier on his fairways, greens and tees.

4. C. M. Mahannah, Riviera Country Club, Coral Gables, constructed the Riviera course with a minimum of hand labor. The savings in costs by the use of heavy construction equipment was demonstrated in an outstanding manner.

## **SEEDING**

1. Bermuda grass fairways established at Riviera Club with seed only instead of the vegetative method usually practiced. Mr. Mahannah's method included the use of a temporary cover seeded with the Bermuda seed and produced superior fairway turf at much less cost than the sprigging method.

2. Mr. Baker and Mr. Mahannah are both working with bent grasses for use on greens in South Florida and considerable promise is indicated. Dr. Roy A. Bair, Everglades Exp. Station, Belle Glade, Fla., is conducting tests with a large number of Bent and Blue Grass strains in cooperation with the USGA Green Section.

## **WEED CONTROL**

Results with 2,4-D formations have been generally disappointing except as a control of "pennywort." Sodium arsenate remains the preferred herbicide with most superintendents.

## **INSECT CONTROL**

The new organic insecticides may be the answer to the mole, cricket problem in Florida courses. Some DDT formulations, sodium hexachloride and "chlordane" are showing promise in this regard. Mr. Norman Hayslip, Entomologist, Everglades Exp. Station, Belle Glade, Fla., is conducting some tests with these materials.

## **HIGH LABOR COSTS CAUSE TREND TOWARD MECHANIZED EQUIPMENT**

By Paul Miller,

R. L. Gould Co., St. Paul, Minn.

We, in the golf course supply business, are quite alarmed with the increased cost of maintaining an 18-hole course.

In our travels, we notice that the trend is toward mechanized equipment, eliminating all the hand labor wherever possible, in order to keep maintenance operation within budget limitations.

In the past, some of the clubs used hand labor for cutting and brushing greens; now they are installing power greens-mowers with brush attachments and putting brush attachments on their spreaders when applying fertilizer and topdressing. Some have increased their fairway mower to a seven instead of a five gang unit, and the rough cutter to a five gang mower instead of a three gang or sickle-type machine. They have discarded the old conventional hand scythe and installed electric grass shears, using a portable generator for power. Others are applying fertilizer and weed control in one operation.

One 18-hole course in the Twin Cities has been maintained with but four men and really kept in first class condition. Greens cutters do all the clean-up work around the greens, such as cutting approaches, raking traps, removing weeds, changing towels, and cutting bunkers when needed. In other words everything is done without going back to do some other little job that may take but a few minutes to do. The men do not get through until along in the afternoon, but they are keeping the budget in line and at the same time doing a good job.