

mental principles of soil fertility, grass propagation and identification, insect and disease control, drainage and irrigation, layout planning and plant materials, and cost accounting during the three week period of the course.

A two day conference for greenkeepers of the state is held immediately following the short course. Students of the course attend the conference.

Complete details of registration and costs may be secured by writing H. B. Musser of Pennsylvania State College.

Rutgers University College of Agriculture at New Brunswick, N. J. will hold the 1937 session of its excellent short course in turf management February 15-20. Lectures are supplemented by class room discussions and by laboratory and field demonstration. Tuition to residents of New Jersey is free. There is a small registration fee for others.

Complete details of the course and registration may be secured from Prof. Frank G. Helyar, Rutgers University, New Brunswick.

At Michigan State college, East Lansing, the annual eight week short course will be conducted from January 4 to March 5, concluding with a two day conference for greenkeepers, chairman, committee members and pros on March 4 and 5. Prof. C. E. Millar and James Tyson, assistant prof. in soils research, manage the course, with members of the college staff giving the majority of the lectures and several noted authorities as guest lecturers. Dr. Carter Harrison, technician of high standing in the golf field, is a newcomer to the Michigan State staff and will figure in the 1937 short course. Fee for the course is \$5 and club dues \$2.

Among staff members who handle the short course at Michigan State, and their fields, are:

Prof. R. L. Hutson, insects; Dr. Ray Nelson, grass and flower diseases; Dr. J. H. Muncie, grass diseases; Prof. Forest Strong, tree diseases; Prof. Karl Dressel, trees and tree surgery; Prof. C. E. Wildon, floriculture; Prof. J. W. Stack, birds, animals, earthworms, etc; Dr. Carter Harrison, grasses; Prof. O. E. Robey, drainage and irrigation, and James Tyson, soils and fertilizers.

At the short courses, sectional meetings and national Greenkeeper Association meetings it is conservatively estimated that greenkeepers invest about \$50,000 a year of their own money for the good of their clubs. In too few instances does a

club allow its greenkeeper his expenses at these educational affairs, although such expenses are a proper and highly profitable budget item. It is due to extensive use greenkeepers have made of these short courses, with the expert contributions of science and research by earnest staff men of colleges, the steady schedule of greenkeepers' meetings, and the constant helpful contact in person and by mail of the USGA Green Section, that the nation's golf courses have come through the depression in amazingly fine shape considering the limitations of budgets and the troubles from weather and insects.

Praises Minnesota Greensmen; His Chairman Is OK, Too

CHARLES ERICKSON, veteran greenkeeper of the famed Minikahda club at Minneapolis, surveys the situation in his territory:

"Depression budgets did not affect us very much, as most clubs in this section have been in very good shape. We had the equipment and we do a little remodeling every year. We turn over one or two greens each year and have plenty of water for our fairways. We have suffered a little for lack of fertilizer, but this year we bought a carload. Our equipment is in good shape so there is no worry there. I have found, however, that some of the clubs in this section are putting in the latest equipment for fairway watering.

"The greenkeepers here in the northwest have done very well. They have kept up their courses in first-class shape. I commend especially the greenkeepers in the Twin Cities and we have had some pretty tough weather to contend with.

"I feel that the greenkeeper and the green-chairman should work hand in hand with each other. I can give no better example than in my own case. H. C. Mackall, who has been our chairman since Wm. F. Brooks passed away, has given me more cooperation than any other chairman could. We suggest to each other and work out our plans and troubles together. In other words, I suggest and he approves, and he suggests and I approve. Everything runs smoothly when both chairman and greenkeeper can work together harmoniously.

"There really is no big problem at present to work out for 1937 unless something unforeseen happens. Due to the drought of the past two years in this section, we will need more fertilizer and water."