

Pennsylvania Greenkeepers' association are given in the following press release:

Schedule Penn State Course

Announcement of the short course and conference for greenkeepers to be held at Pennsylvania State College, School of Agriculture, State College, Pa., has been made by the dean of the school, 111 Agriculture building. Enrollment is limited to the first 30 who apply.

The preliminary announcement gives the following details of the course which will run from February 2 to 28.

The aim of this course is to give instruction in the broad underlying problems that have to deal with practical turf management. Anyone who is interested and who can read and write will be eligible. The course is especially designed, however, for those who have had some experience with fine turf management. During the first three weeks the subjects listed below will be studied. The fourth week those attending the short course will be expected to attend the Greenkeepers' Conference.

The courses will be taught in the college classrooms and laboratories.

Expenses

Living expenses and college fees for the four weeks need not exceed \$60.00. The largest single item of expense is room and board, which will be from about \$9.50 to \$10.50 a week. An incidental fee of \$10.00 is payable by all winter course students. Other expenses will consist of laundry, stationery, and miscellaneous items. In some of the courses books may be required.

Description of Work

1. *Soils and Fertilizers*—Discussion and laboratory studies covering the origin, formation and physical properties of soils, and soil acidity, as well as the purchase, mixing and use of fertilizers and lime.

2. *Fine Turf Grasses*—Class room and laboratory work on classification, identification, and propagation of the important fine turf grasses, including seed identification and analysis.

3. *Weeds*—The characteristics, life habits, and control means of the various weeds common to golf courses will be studied. Some time will also be given to weed seed identification.

4. *Insects*—A brief study of the insects affecting fine turf grasses with particular reference to their control.

5. *Diseases*—A consideration of the nature of diseases and their effect on plants, together with the principles of

prevention and control. Application to turf problems will be emphasized.

6. *Landscape Problems*—Factors determining the location and layout of golf courses, a study of golf course plans; grading problems; discussion of trees and shrubs for golf courses and club house grounds; their identification, special uses, planting, and maintenance.

7. *Machinery, Drainage, and Irrigation*—Detailed study of gasoline engines, their operation, repair, care, and adjustment. The location, design, and construction of tile drainage systems. Power requirements, design, and operation of spray irrigation systems; pipe friction, pipe sizes, and pumps.

Greenkeepers' Conference

From 9:00 a. m. Feb. 24 to Noon Feb. 28, 1930

The Greenkeepers' Conference is designed for green committee chairmen, greenkeepers, and others who desire to keep informed on the most recent developments of fine turf management. The faculty committee will work with representative greenkeepers in formulating a detailed program. The major portion of the time will be given to roundtable discussions. The subjects to be considered will be essentially the same as those offered during the four weeks' short course. The speakers will be discussion leaders rather than lecturers. A prominent part of the program will be short talks by practical greenkeepers based on their own experiences.

ONE common criticism of small-town courses is that many are too short. This is due to two reasons: first, the attempt is too often made to put them on a scanty area of ground; and secondly, the original layout is invariably made by a local committee which has not done this thing before and has a natural inclination to misjudge the distance of holes. Since most of them are nine-hole size, we find that the total grounds rarely measure above 45 or 50 acres. By the time the clubhouse, driveway and parking ground are taken out, there is not sufficient room left for the needs of the course proper.—*C. A. Tregillus.*

* * *

THE injuries which result in winter-kill in its many forms are caused by several agencies, but rarely, if at all, from extreme frost. Variable winter weather is more to blame than below-zero temperature, also methods in handling greens, and in the construction of greens themselves.