# Short Course for Greenkeepers

University of Wisconsin devotes five days to interesting study of problems of course maintenance and turf.

## BY H. HANKINSON

THE first greenkeepers' course ever held by The subjects covered a wide range of interests a state university in the Mid-west was conducted by the College of Agriculture at the University of Wisconsin, Madison, from February 10th to 14th inclusive. Fifty-nine greenkeepers from Illinois, Minnesota and Wisconsin were enrolled in the course.

Faculty members for this course included the best that could be secured in the various fields. Specialists were selected not only from the College of Agriculture, but also from other places, so that expert instruction in all phases of golf grounds management could be given.

from maintenance problems, golf grounds equipment and land drainage, to discussions regarding care of turf and plantings and the preservation of natural beauty on golf courses.

The best kinds of grasses for golf courses and greens and the care of turf were presented in detail in several lectures by John Monteith, grass specialist in the Greens section of the United States Golf association. The soil as a basis for plant growth and the use of fertilizers were handled in a practical way by O. J. Noer, soils and fertilizer specialist, and by C. J. Chap-



GREENKEEPERS ATTENDING THE UNIVERSITY OF WISCONSIN'S SHORT COURSE

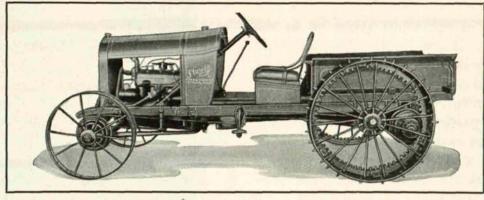
GREENKEEPERS ATTENDING THE UNIVERSITY OF WISCONSIN'S SHORT COURSE

BOTTOM ROW, left to right—H. W. Schmitz, Sparta, Wis.; F. J. Ranney, West Salem, Wis.; John Bauer, Prairie View, Ill.; Adam Fleek, Brodhead, Wis.; C. R. Binkley, Freeport, Ill.; R. Kurtz, Milwaukee, Wis.; V. Miller, Milwaukee, Wis.; W. Merrifield, Delaffeld, Wis. SECOND ROW—E. A. Leitzinger, Cambridge, Wis.; F. Boeye, Northbrook, Ill.; F. J. Dinnelli, Northmoor, Ill.; H. Neipert, Jefferson, Wis.; P. F. Sieber, LaCrosse, Wis.; D. Gates, Williams Bay, Wis.; Fred Peters, Waukesha, Wis.; E. A. Fox, Racine, Wis.; C. B. McCann, Eau Claire, Wis. THIRD ROW—Harry Stewart, Cambridge, Wis.; C. L. Kalitoski, Westfield, Wis.; H. J. Wittenberg, LaCrosse, Wis.; Will Bryant, Brown Deer, Wis.; H. Bergan, Winthrop Harbor, Ill.; P. Brockhausen, Wauxvatosa, Wis.; Don R. Boyd, Northbrook, Ill. FOURTH ROW—P. G. Wagner, West Bend, Wis.; P. W. Sommers, Elkhorn, Wis.; Otto Schael, Wausau, Wis. FIFTH ROW—R. E. Farmer, Milwaukee, Wis.; V. S. Bietz, Beloit, Wis.; F. B. Reinhart, Beloit, Wis.; Dick Ryerson, Milwaukee, Wis. SIXTH ROW—J. Glaster, Delavan, Wis.; M. P. Christensen, Racine, Wis.; H. W. Kubiak, LaCrosse, Wis.; F. L. Johns, Platteville, Wis.; E. J. Simons, Rockford, Ill.; A. R. Ludwigsen, Hartland, Wis.; E. Foster, South Milwaukee, Wis.; E. J. Levenhagen, Milwaukee, Wis. SEVENTH ROW—B. M. Donavan, Bloomington, Ill.; R. E. Meyers, Baraboo, Wis.; E. M. Iverson, Williams Bay, Wis.; J. N. Monical, Maywood, Ill.; R. R. Springer, Rockford, Ill.; ElGHTH ROW—A. J. Gillett, Rockford, Ill.; F. J. Hartwell, Hinsdale, Ill.; J. S. Bone, Madison, Wis.; Mavor Boyd, Hillside, Ill.; J. B. Boyd, Northbrook, Ill.; L. W. Quigley, Wantwatosa, Wis. LAST ROW—L. R. Bloomquist, Minneapolis, Minn.; R. Zwerg, Madison, Wis.; R. B. Michael, Oconomowoc, Wis.

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man and E. J. Graul, professors of soils in the College of Agriculture.

Among other worthwhile things in his talks, Mr. Noer stressed the importance of the physical characteristics of soils and showed that many disappointments in the matter of turf were the result of neglect to get good physical structure at the start.

# Seed Expert Gives Advice

IN lectures and seed demonstrations, A. L. Stone of the Wisconsin agronomy department informed the greenkeepers of the impurities to be found in cheap mixtures of grass seeds and warned against purchasing seeds from companies not known to be reliable. In his laboratory section, students of the course were shown how to detect certain weed seeds, chaff, and other matter detrimental to good stands of grass.

Diseases of grass and other pests of golf courses, such as animals and insects, were discussed in an enlightening manner by A. S. Dahl, disease specialist of the United States Golf association and by H. F. Wilson of the

Wisconsin economic entomology department.

Drainage problems were handled by E. R. Jones and F. W. Duffee, College of Agriculture engineering department, and home-made devices and commercial equipment for golf courses were taken up by C. A. Tregillus, manager of the A. D. Lasker estate at Lake Forest, Illinois.

Franz A. Aust, associate professor of landscape design, gave suggestions and advice in the care of trees. He also pointed out that responsibilities rested with greenkeepers everywhere in the matter of helping to preserve natural outdoor beauty. The golf course, he said, should be maintained as a portion of America's beautiful countryside and seldom landscaped to resemble a city estate.

# Laboratory Work Interesting

FOUR laboratory sections during the course gave all students opportunity to study more in detail the problems taken up in lecture and discussion periods. These groupings were particularly helpful because actual equipment and materials could be seen and handled. Labora-

tory subjects consisted of seed studies, soil problems, gas engines, and land drainage. Each group was given instruction in a different subject each day.

An hour or more every day was given over to discussions of the topics taken up in the lecture periods. These round table talks were informal; students were urged to ask questions relating to their own personal problems in golf course management, and answers were given by experts in the particular line of discussion announced and by experts in closely allied fields, one or more of whom were always present. In these round table discussions, students also profited from an exchange of experiences with other students, they said.

At the close of the four and one-half day session, the greenkeepers were agreed that the information and practical studies packed into the course might well have been extended over a period of several weeks.

Following is the formal program of the course, and a list of the students enrolled:

## Short Course in Greenkeeping University of Wisconsin, Madison, Wisc. STAFF

F. A. Aust. Professor of Landscape Design, University of Wisconsin.

C. J. Chapman. Professor of soils, University of Wisconsin.

A. S. Dahl, Disease Specialist. Green Section, U. S. Golf Ass'n.

F. W. Duffee. Professor of Agricultural Engineering. University of Wisconsin.

E. J. Graul. Professor of Soils, University of Wisconsin.

E. R. Jones, Professor of Agricultural Engineering, University of Wisconsin.

John Monteith. Grass Specialist, Green Section,

U. S. Golf Ass'n. O. J. Noer. Soils and Fertilizer Specialist, formerly Soils Dep't, University of Wisconsin.

A. L. Stone. Professor of Agronomy, University

of Wisconsin. C. A. Tregillus. Manager of A. D. Lasker Estate,

Lake Forest, Illinois.

H. F. Wilson. Professor of Economic Entomology, University of Wisconsin.

### **PROGRAM**

General sessions held in Horticultural Building.

Monday, February 10

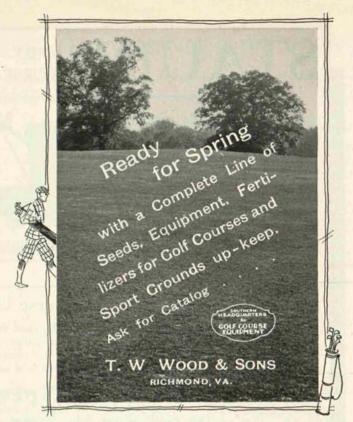
10:00 a.m. Registration 1:15 p.m. Announcements

1:30 p.m. Grasses for golf course, their

adaptation and propagation \_\_\_\_Mr. Monteith

3:00 p.m. Properties of soil and their relation to plant growth \_\_\_\_\_

4:00 p.m. Soil acidity, its detection and control



# Tuesday, February 11

8:00 a.m.	Grass seeds and their imp	ourities Mr. Stone
9:00 a.m.	Sources of plant nutrients,	Mr. Chapman
10:00 a.m.	Grasses for greens	Mr. Monteith
	Laboratory instruction	
	1—Seed studies	
Section	2—Gas engines	Mr. Duffee
Section	3—Land drainage	Mr. Jones
	4—Soils	
	The use of fertilizers for	
develop	ment and maintenance	Mr. Noer
	Wednesday February	2

Wednesday, February 12
8:00 a.m. Diseases of grass and their control Mr. Dahl
9:30 a.m. Animal and insect pests of golf courses Mr. Wilson
10:00 a.m. Round table on grass fertiliza- tionMr. Noer
1:30 p.m. Laboratory instruction Section 1—Gas engines Section 2—Land drainage Section 3—Soils Section 4—Seed studies 3:30 p.m. Tree planting and care Mr. Aust
Thursday, February 13

	The state of the s
9:00 a.m.	Principles of land drainage Mr. Jones Care of turf Mr. Monteith Round table on grass problems Mr. Monteith
Section Section	Laboratory instruction 1—Land drainage 2—Soils
Section	3—Seed studies 4—Gas engines The labor factor Mr. Tregillus

## Friday, February 14

8:00 a.m. Drainage problems \_\_\_\_\_ Mr. Jones 9:00 a.m. Golf course equipment \_\_Mr. Tregillus Landscape problems \_\_\_\_ Mr. Aust 10:30 a.m. 1:30 p.m. Laboratory instructions Section 1—Soils Section 2—Seed studies Section 3—Gas engines Section 4—Land drainage Final conference 3:30 p.m.

# Student Enrollment SECTION I

E. A. Lietzinger, Cambridge, Wis., Lake Ripley Harry Stewart, Fort Atkinson, Wis., Lake Ripley Roy Meyer, Baraboo, Wis., Baraboo J. E. Snobble, Evanston, Ill. A. J. Gillett, Rockford, Ill., Harlem Hills
B. M. Donovan, R. 3, Bloomington, Ill., Highland Park
Frank J. Dinelli, Ravinia, Ill., Northmoor C. C.
Claire Binkley, Freeport, Ill., Freeport C. C.
R. Burns Michael, Oconomowoc, Wis., Oconomowoc C. C. F. L. Johns, Platteville, Wis., Platteville C. C.
Fred Boeye, Northbrook, Ill., Middlebrook C. C.
E. J. Simon, R. 5, Rockford, Ill., Sandy Hollow C. C.
J. B. Boyd, Northbrook, Ill., Sunset Ridge C. C. Paul Brockhausen, Wauwatosa, Wis., Blue Mounds C. C. L. W. Quigley, Wauwatosa, Wis., Jacobsen Mfg. Co.

### SECTION II

C. B. McCann, Eau Claire, Wis., Hillcrest Golf C. F. J. Hartwell, Hinsdale, Ill., Ruth Lake C. C. Harry A. Neipert, R. 1, Jefferson, Wis., Meadow Spgs. G. C. Don R. Boyd, Northbrook, Ill., Techny Fields F. J. Ranney, West Salem, Wis., Maple Grove C. C. Fritz Reinhart, Beloit, Wis., Morse Hills G. C. James Gloster, Delavan, Wis., Lake Lawn G. C.

Peter Sieber, R. 3, La Crosse, Wis., Winneshiek G. & C. C. H. J. Wittenberg, La Crosse, Wis., Winneshiek G. & C. C. L. R. Bloomquist, R. 2, Minneapolis, Minn., Country Club J. H. Bauer, Prairie View, Ill., Kildeer C. C.
E. M. Iverson, Williams Bay, Wis., Kishwaukectoc C. C.
Donald Gates, Williams Bay, Wis., Kishwaukectoc C. C.
Roy R. Springer, R.3, Rockford, Ill., Mauh Mah Tee See G. C. Fred Peter, Waukesha, Wis., Spring City

### SECTION III

Mayor Boyd, Hillside, Ill., Maywood G. C.
Otto Schael, Wausau, Wis., Wausau C. C.
Harold Bergan, Winthrop Harbor, Ill., Oakshore G. C.
Robert E. Farmer, North Milwaukee, Wis., Brynwood C. C. Robert E. Farmer, North Milwaukee, Wis., Brynwood C. C. Evald Fischer, South Milwaukee, Wis., Grant Park G. C. E. J. Levenhajen, West Allis, Wis., Greenfield Park G. C. Russell Kurtz, Wauwatosa, Wis., Currie Park G. C. A. W. Wilbrandt, N. Milwaukee, Wis., Brown Deer Pk. G. C. Phillip Wagner, R. 4, West Bend, Wis., West Bend C. C. Paul W. Sommer, R. 1, Elkhorn, Wis., Lauderdale C. C. M. P. Christensen, Racine, Wis., Jacobsen Mfg. Co. Eugene A. Fox, Racine, Wis., Racine C. C. Adam Fleek, Broadhead, Wis., Decatur Lake C. C. Dick Ryerson, Milwaukee, Wis., Equipment Dealer

### SECTION IV

J. N. Monical, Maywood, Ill., Maywood G. C.
Alfred Ludwigson, Hartland, Wis., Cheniqua C. C.
Verland Miller, S. D. R. 2, Milwaukee, Wis., Tuckaway C. C.
Albert Nettum, Stoughton, Wis., Stoughton C. C.
Wesley Merrifield, Delafield, Wis., St. John's G. C.
Clement Kalitowski, Winona, Minn., Westfield G. C.
Harry Kubiak, La Crosse, Wis., La Crosse C. C.
Henry White, Lake Geneva, Wis., Hillmoor G. C.
John S. Bone, Madison, Wis., Black Hawk C. C.
H. W. Schmitz, Sparta, Wis., Sparta C. C.
R. F. Zerg, Madison, Wis., Municipal
V. S. Dietz, Beloit, Wis., Beloit C. C.
Owen Baker, Beloit, Wis., Superintendent of Parks
Ross Yost, Beloit, Wis., Municipal
C. L. Bingham, Beloit, Wis., Municipal

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