



Prof. Lawrence S. Dickinson, Head of the Section of Agrostology, leads a laboratory class of students working on different projects. Bob Grant and Dan Graham in foreground are preparing a list of trade names of chemicals used on turf and are scanning Golfdom advertisements for information.

U. of Mass. Offers Two-Year Course in Turf Management

By GEOFFREY CORNISH

Massachusetts Agricultural College, now the University of Massachusetts at Amherst, was the first college in the United States to offer a resident course in turf management. This is the ten week winter school for greenkeepers founded in 1927 by Professor Lawrence S. Dickinson.

Today, the University of Massachusetts continues the ten weeks winter school and also offers a two year course in Turf Management.

Ten Weeks Winter School

The purpose of this course held annually from the beginning of January until mid-March, is to furnish turf growers with knowledge of all aspects of turf culture. It is open to superintendents of golf courses, cemeteries, parks and grounds and their assistants, to other golf course employees, lawn builders and turf managers of airports and highway developments.

The course is limited to 25 men annually. The course is of value to all turf growers, but emphasis is placed on greenkeeping. The ten weeks period is concluded with the annual turf conference of the University of Massachusetts.

No entrance examinations are required, but it is expected that the student will have considerable practical experience. Applications are accepted until November first of each year and then screened on the basis of experience and date of filing.

Students have registered in the Winter School from the following countries and states:

Bermuda	1	New Hampshire ..	3
Canada	5	New York	60
Canal Zone	2	North Dakota	1
Arkansas	1	New Jersey	5
Connecticut	31	Nebraska	1
Delaware	1	Ohio	12
Illinois	16	Oklahoma	2
Indiana	3	Pennsylvania	15
Iowa	4	Rhode Island	4
Kentucky	5	Tennessee	1
Massachusetts	175	Vermont	5
Maine	3	Virginia	3
Michigan	5	Washington	1
Minnesota	6	Wisconsin	4
Missouri	6		
		Total	378

The tuition fee is \$25.00, payable at time of registration. Other expenses are estimated as room, ten weeks at \$5.00 and board, ten weeks at \$12.00. The course is approved for Veterans G.I. Training.

Instruction is given eight hours a day and five days a week. Representatives of leading commercial houses and superintendents are frequent visitors and are asked to address the class during their visit to the University.

Courses given are tabulated as follows:

Course	Weekly Period	Length of Course
Agronomy — Soils and Fertilizers	1 lecture — 2 labs.	10 weeks
Botany for the Greenkeeper	1 lecture — 2 labs.	10 weeks
Entomology — Insect Pests	1 lecture — 1 lab.	5 weeks
Agricultural Engineering	1 lecture — 1 lab.	5 weeks
Water Systems for Turf Areas	1 lecture — 2 labs.	5 weeks
Drainage	1 lecture — 2 labs.	5 weeks
Construction of Turf Areas	1 lecture — 2 labs.	5 weeks
Equipment	1 lecture — 2 labs.	5 weeks
Grasses	1 lecture — 2 labs.	5 weeks
Managerial Problems	1 lecture — 2 labs.	10 weeks
Use of Chemicals on Turf	1 lecture — 2 labs.	5 weeks

Instruction of these courses is shared by the Section of Agrotology and various departments of the University. A description of the courses follows.

I Agronomy — Soils & Fertilizers. Instructor: Dr. Dale Sieling, Head of the Department of Agronomy. Fundamental properties of soils and their management as related to golf greens and other turf areas constitute the main part of the course. A complete study of fertilizers and their use is made.

II Botany for the Greenkeeper — The living plant and its parts are discussed. A study of parts of the grass plant and fungus diseases of turf is made.

III Entomology — Instructor: Dr. John Hanson. Insect pests that damage turf are studied.

IV Agricultural Engineering — This study is related to motors.

The following courses are taught by Professors L. S. Dickinson and Geoffrey Cornish and by Mr. Paul J. Murphy, visiting lecturer, for the winter school:

V Water Systems for Turf Areas — A study of standard types of water systems with particular reference to layout.

VI Drainage — The problem of land drainage is discussed and practical problems worked out. The student is taught the use of the level and how to set grades.

VII Construction of Turf Areas — Construction of golf courses, recreational areas, athletic fields, airports, lawns and cemeteries is studied from the turf viewpoint.

VIII Equipment — Maintenance equipment is carefully evaluated, particularly as to use and cultural results. Students are given practice in assembling equipment.

IX Grasses — The characteristics and adaptabilities of turf grasses are studied. Students are given practice in identification of grasses and seeds.

X Managerial Problems — Cultural and monetary costs of maintenance and construction of turf areas are considered together with purchasing practices, management reports, and record keeping.

XI Use of Chemicals on Turf — Chemical fungicides, insecticides, and herbicides

used on turf together with their methods of application and expected results. A card index is completed of all such products on the market.

Two Year Course

The two year course, formerly limited to ten students annually, is now open to fifteen students. Applications are accepted until Sept. 1, each year.

The course is arranged in such a manner that a student who has completed the course will be well qualified to accept a position as an assistant or the actual superintendency of a golf course, park, or cemetery or to establish a business in his community.

The course consists of four semesters and a six month placement training period. Courses are taught in all phases of turf and supporting courses are given. The supporting courses have been carefully chosen for their close alliance to problems of turf maintenance. Each student's placement training and special interest is considered in his chosen field, whether it be golf course, park, cemetery or private business.

Courses given are as follows:

First Year — first semester—October 1 to January 31 (sixteen weeks resident instruction)

Agronomy S1—Soil Management
 Agrostology S1—The business and profession of fine turf management
 Agrostology S3—Uses and Requirements of Turf Areas
 Floriculture S1—Garden Materials
 Horticulture S1—Plant Materials
 Public Speaking S1
 Physical Education S1—(Required of men students not participating in football.)

Second Semester — (Eight weeks resident instruction followed by six months placement training.)

Agronomy S2—Fertilizers
 Agrostology S2—Construction of Turf Areas
 Agrostology S4—Maintenance of Turf Areas
 Botany S2—Diseases of Trees and Shrubs

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UNIV. OF MASS. OFFERS

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Entomology S6—Turf Insects

Public Speaking S2

Elective—Physical Education S4 (Basketball and Hockey)

Second Year—first semester—October 1 to January 31 (Sixteen weeks resident instruction)

Agricultural Engineering S3—(Farm Shop)

Agrostology S5—Correlating all Courses and Water Systems

Agrostology S7—Disease Control

Arboriculture S1—Lectures

Business English S1

Horticulture S3—Surveying and Mapping

Horticulture S7—Grounds Maintenance

Physical Education S5—(Required of students not participating in football.)

Second Semester—February 1 to May 31 (Sixteen weeks resident instruction)

Agricultural Engineering S2—Motors

Agrostology S6—Turf Maintenance as a Business

Agrostology S8—Layout and Construction of Turf Areas

Arboriculture S2—Lectures

Floriculture S8—The Uses of Herbaceous Plants

Horticulture S4—Landscaping

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Electives—Physical Education S4 (Basketball and Hockey), Physical Education S6 (Baseball)

A description of the turf courses given by the Section of Agrostology and taught by Professors Lawrence S. Dickinson and Geoffrey Cornish is as follows:

Agrostology S1—This course provides a background for the succeeding courses. The numerous aspects that enter into professional turf growing are introduced and correlated with each other and the actual growing of grass.

Agrostology S2—(Construction of Turf Areas) Influencing of foundation, subsoil and topsoil zones. Talks preliminary to placement training. Adaptation of Agronomy S1.

Agrostology S3—(Uses and Requirements of Turf Areas) Grass seed and plant characteristics, identification and adaptation. Germination of seeds and growing of plants.

Agrostology S4—(Maintenance of Turf Areas) Fertilizing, weeds, clipping and watering, with practical work and problems. Adaptation of Agronomy S2.

Agrostology S5—(Correlating all courses) Thorough resumé of the summer work by students, discussing labor, operations, equipment, and results. Application of first year courses to managerial and cultural problems.

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Agrostology S6 — (Turf Maintenance as a Business) Cost, purchasing and reports, and public relations.

Agrostology S7—Two parts—A: Water Systems, B: Diseases, weeds and insect pests, with their controls.

Agrostology S8—(Layout and Construction of Turf Areas) Construction of recreational areas, athletic fields, airports and cemeteries, is studied in detail from the turf viewpoint. The design of golf courses is introduced. Contracting law and financing of turf construction contracts are discussed.

Tuition is \$50.00 a semester for in state students and \$200 for those from out of state. The course is approved for G.I. Training.

Two classes have been graduated. Graduates are listed as follows with their present positions:

Class of 1948

Judson F. Edwards, Supt., Litchfield CC, Connecticut

Paul J. Murphy, Operator, Little St. Andrews Golf Center, Shrewsbury, Mass.

Paul J. O'Leary, Supt., Warwick CC, Warwick, R.I.

Thomas G. Rohan, Turf Spraying Specialist, Holyoke, Mass.

Robert L. Sellers, Pro-Greenkeeper, Keene CC, New Hampshire

John L. Sullivan, Pro-Greenkeeper, Suffield CC, Conn.



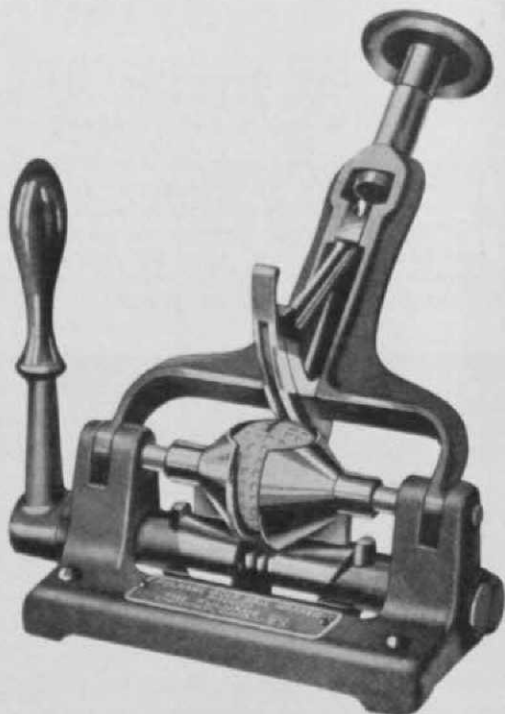
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