

Southern California Turf Culture

A Quarterly Publication devoted to the activities of the Experimental Program in Turf Culture of
the College of Agriculture, University of California, Los Angeles 24, California.

APRIL, 1951

VOL. 1. NO. 2

SOUTHERN CALIFORNIA CONFERENCE ON TURF CULTURE

Three of the foremost authorities on turf culture in the nation will appear on the program of the Third Annual Southern California Conference on Turf Culture, to be held April 30 and May 1, 1951, on the Los Angeles Campus of the University of California, and at the Riviera Country Club in West Los Angeles.

These are Prof. H. B. Musser, Agronomist at Pennsylvania State College, Dr. O. J. Noer of the Milwaukee Sewerage Commission, and Dr. Fred V. Grau, Director of the U. S. Golf Association Green Section. This will be an unusual opportunity for all of those interested in Turf Culture to become familiar with the newest developments in this field.

Prof. H. B. Musser was editor of the recent book "Turf Management" which is now the authoritative standard work on turf culture. He has been in charge of the turf research program at Pennsylvania State College since 1929. This program is now by far the most elaborate of all the experiment station projects in this field. During World War II, Professor Musser was attached to the staff of the Commanding General of the Air Forces in Washington, D.C., and was in charge of the supervision of dust and erosion control on all of the Air Force fields in the continental United States.

Previous to starting work on turf culture at Penn State, Professor Musser spent three years with the U. S. Department of Agriculture, and five years in extension work in the state of Pennsylvania. Professor Musser went to college at Bucknell University and Pennsylvania State College.

Mr. O. J. Noer has had a long experience in the field of turf culture. He was for a time on the staff of the University of Wisconsin, and left to join the technical staff of the Milwaukee Sewerage Commission. Few men have traveled more widely in consultation work on turf problems. He is a recognized authority on nutrition and soils problems in relation to turf growing.

Dr. Fred V. Grau was a speaker at the conference last year, and will be with us again. He is Director of the United States Golf Association Green Section, and since taking this position has initiated many new lines of experimental work, often in cooperation with various State Agricultural Experiment Stations.

Dr. Grau took care of turf plots at the University of Nebraska at the beginning of his col-

lege career, and also served as a greenkeeper during this period. Later he received a doctorate from the University of Maryland, and from 1935 to 1945 served as an Extension Agronomist at Pennsylvania State College. For one year during World War II he worked with the Chief of Engineers in the War Department, in grassing airfields and other military installations.

Under Dr. Grau, the Green Section now has cooperative work in half of the State Experiment Stations. A number of post-graduate fellowships have been established at several Universities, which has added to the limited supply of qualified leaders in turf research. The Green Section has also sponsored the preparation, under the editorship of Professor Musser, of the first authoritative manual on turf culture to appear in 25 years.

Speakers will also include members of the University staff at Los Angeles, and Dr. Robert Hagan from the Davis Campus will discuss problems of water utilization. Results of the experiments of the past year in new grass introduction and testing, fertilizers, insect and disease control, soils, watering, and related subjects will be outlined.

All persons interested in problems of turf culture on parks, golf courses, sports fields of all kinds, airports, cemeteries, estates, or home lawns, are invited to attend. A registration fee of one dollar will be charged each day.

The opening session will be held on the UCLA turf plots at 300 Veteran Avenue, West Los Angeles, on Monday morning, April 30, at 9:45.

The remaining sessions will be held at the Riviera Country Club in West Los Angeles, at Sunset Boulevard and South Capri Drive. Luncheon will be served each day at the Riviera Country Club, and a banquet will also be held there at 7:00 P.M. Monday, April 30.

Additional information may be obtained from the Division of Floriculture and Ornamental Horticulture, College of Agriculture, University of California, 405 Hilgard Avenue, Los Angeles 24, California.

This year the Northern California Turf Conference will be held on the Berkeley Campus of the University on April 26 and 27. Information regarding this course may be obtained from Mr. John J. McElroy, Agricultural Extension Service, University of California, Berkeley 4, California.

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GIFTS

The experimental Program in Turf Culture on the Los Angeles Campus has been supported by privately donated funds, and at the present time is supported in a large measure in this manner. All that we have been able to accomplish thus far has been due to the generous support of many individuals and firms. We are indeed most grateful to all who have assisted us in various ways since the beginning.

Gifts of funds or equipment accepted by official action of the Regents of the University of California, and listed in issues of "California Agriculture" since January 1, 1951 are as follows:

January, 1951:

California Spray Chemical Corp. -
5 gal. agrl. herbicide RE-1732
Randall Mills Corp. -
2 10-lb sacks of sand conditioner
4 50-lb sacks of guano
Southern California Golf Association and
Various Donors -
\$2000.00

February, 1951:

Dow Chemical Company -
5 lbs. ITC - S-11-71
Harmon and Company -
1 gal. Richfield weed killer "A"
Northrup-King Seed Company
5 lbs. Poa trivialis
5 lbs. Merion bluegrass

March, 1951:

Atkins and Durbrow, Limited -
75 lbs. Driconure fertilizer
Soi 1 Pep Sales Company
300 lbs. Pep Soil

Some additional gifts have been reported to the Regents, but await official notice of acceptance.

There have also been some most helpful donations of services and loans of special equipment since January 1, These are as follows:

Hardie Manufacturing Company, Los Angeles-
Servicing of equipment
Pacific Toro Company, Los Angeles -
Loan of equipment
Athletic Department, UCLA -
Loan of equipment.

Past Donors of Funds to the Experimental Program in Turf Culture

Annandale Golf Club
Apple Valley Country Club
Arrowhead Country Club
Bel-Air Country Club
Barbara Worth Country Club
Bren wood Country Club
California Country Club
Hacienda Golf Club
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Alondra Park Golf Club
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Professional Golfers Association of America
Southern California Greenkeeping Superintendents Association
Los Angeles Turf Club (Santa Anita)
City of Los Angeles - Coliseum
City of Los Angeles - Department of Parks and Recreation
Interment Association of Southern California
Southern California Lawn Bowling Association

TURF MEETING IN SAN DIEGO

On February 24, 1951 the officers of the Athletic and Recreational Turf Association conducted a turf meeting in San Diego, attended by many of the top personnel responsible for the maintenance of turf.

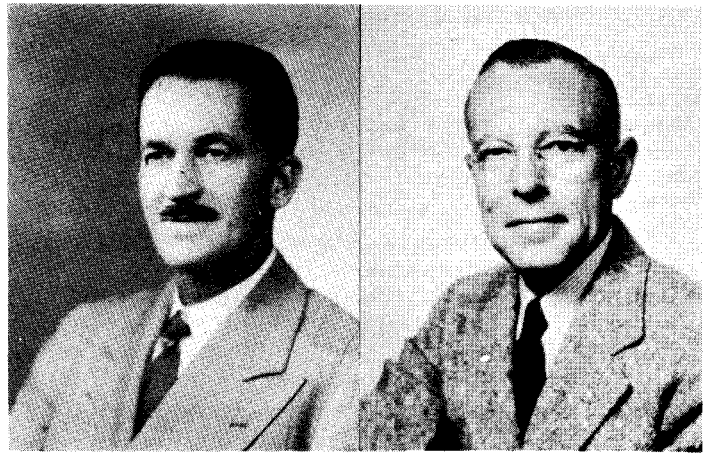
Mr. Frank Rose of the Balboa Stadium made the necessary arrangements for the meeting. After attending the meeting of the Los Angeles group on January 12, he felt that there should be a local group for San Diego, and proceeded to plan for the meeting.

The program was varied, and had something of interest for all who attended. Frank E. Collier of Occidental College acted as chairman, and discussed his maintenance program.

Mr. Arthur Hicks of Cal Tech gave a talk on practical suggestions for track and field. Mr. Carl Bloomfield discussed the annual maintenance program of the Rose Bowl. Mr. Charles Wenger, City Landscape Supervisor, talked over the methods of management of athletic and play fields of the Los Angeles school system. Mr. John Gallagher of UCLA gave a report on the work being done at the University and showed colored slides. Mr. Gene Marzolf of Northrup King & Co. and Pacific Toro Company, Inc. demonstrated the use of the Aerifier.

Discussion periods held at the end of each talk brought up the many problems faced by these people. Some were answered, but others will have to be worked out by experimentation.

At the close of the meeting, a motion was made to form a local organization to be affiliated with the Los Angeles branch of the Athletic and Recreational Turf Association. Mr. Rose was named Acting Chairman of the Organization Committee



DR. FRED V. GRAU,
DIRECTOR OF THE U.S. GOLF ASSOCIATION
GREEN SECTION

PROF. H. B. MUSSER,
PENNSYLVANIA STATE COLLEGE

THE ATHLETIC AND RECREATIONAL TURF ASSOCIATION

One of the newest and fastest growing organizations devoted to turf culture in Southern California bears the name given above.

At the Southern California Conference on Turf Culture held in May, 1950, a show of hands at one of the sessions indicated that over 20 of those present were interested primarily in athletic fields and related subjects. The evidence of this specialized interest led to a meeting at the Los Angeles Coliseum, at which about 45 were present. Those attending voted to form an association for the promotion of study and development of turf for athletic and recreational uses.

The next meeting was held August 25, at which time a committee was appointed for the preparation of By-Laws for the new organization. The committee met on October 20 and November 27. These By-Laws were adopted at a meeting held January 12 at the turf plots on Los Angeles Campus. Over 50 persons were present.

The following officers were elected:

President - Frank E. Collier,
Occidental College
Vice Pres.- Charles Wenger
Los Angeles City Schools
Secretary-Treasurer -
Arthur Hicks
Calif. Institute of Technology
Representative on Research Advisory Committee -
Carl Bloomfield
Rose Bowl, Pasadena

An educational program at this meeting included a discussion of the experimental program of the University on turf culture by Prof. V. T. Stoutemyer, a discussion of sod webworm by Prof. R. N. Jefferson, and a talk on the renovation of running tracks by Mr. Joseph Pike of the Los Angeles City Schools.

At the request of several schools in San Diego, a meeting was held there on February 24. Those present voted to establish a branch of the Association in San Diego, with the members holding full membership in the original organization formed in the Los Angeles area. About 30 persons were present at this meeting.

In the years just preceding World War II, the St. Ives Research Station at Bingley, Yorkshire, England, had a large staff devoted to research in turf culture and published an exceptionally fine, thick quarterly journal, the Journal of the Board of Greenkeeping Research.

We have been delighted to note that publication was resumed, although as an annual, doubtless due to current economic conditions in the country. There has been no reduction, however, in the quality of the publication, and we hope that in time it may be issued as a quarterly journal.

Excellent technical articles are published on seeding methods, insects, diseases and other pests, care of sports fields, and all the other phases of turf culture. The sponsoring organization is a private enterprise which is financed by subscriptions. Various advisory services are rendered to contributors. There are two advisory committees, The Greenkeepers Advisory Committee and the Scientific Research Committee. The latter includes some of the most distinguished agricultural scientists in Great Britain.

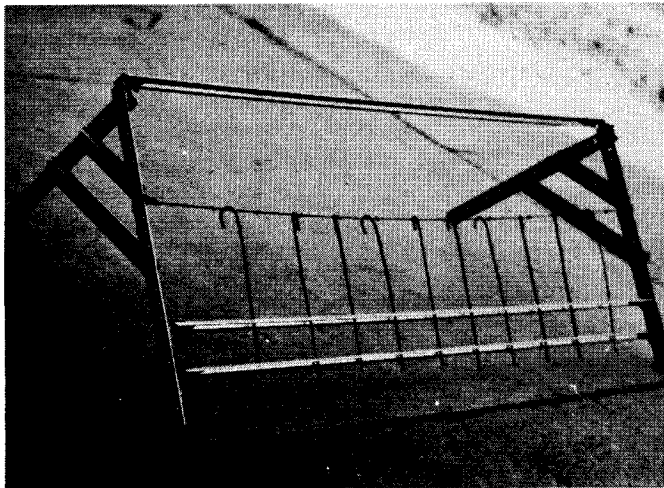
Those who are interested in keeping informed of developments in turf culture should plan to include this journal in their libraries.

ATTENTION

We are particularly anxious that the unusual array of authorities on Turf Culture appearing on our coming conference on Turf Culture on April 30 and May 1, be called to the attention of Park Superintendents, Greens Chairman of Golf and Lawn Bowling Clubs, and all others directing the care of fine turf.

We believe that they should grant full opportunity for all employees in responsible positions to attend the sessions of this conference. This relatively small investment should result in a great saving of funds and effort together with an improvement in the quality of turf produced.

We believe that there are no higher authorities in the field of turf culture than the three featured speakers who are being brought to California this year.



INSTRUMENT USED IN POINT QUADRAT STUDIES ON COMPOSITION OF TURF AT UCLA

THE POINT QUADRAT METHOD FOR ANALYZING THE COMPOSITION OF TURF

M. Zaki Mahdi, Graduate Student

As with other vegetation, the different species of grasses readily respond to environmental changes. If the habitat becomes warmer or colder, wetter or drier, better or more poorly lighted, etc., certain species increase, encroaching on others which decrease accordingly. Such changes in the relationship of survival and competition of species in turf grasses are of great scientific economic importance.

The features of this competition and the trends of change in the development of the association are measured by using ecological methods.

Among the various methods of quantitative analysis, the point-contact method is especially serviceable in dense, short grassland such as lawns, golf course greens, and athletic fields. The point method was first discovered by two New Zealanders, E. Bruce Levy and E. A. Madden, in 1933.

This method is based on the mathematical concept of the homogeneity of a unit area as presented by a pin point. The method consists in taking a sufficient number of points at random, and in recording all vegetation that is hit as the point is projected from above into the sward.

The apparatus they used is a frame, mounted on pointed legs and carrying a row of steel pins 2 inches apart, so held that they slide up and down in a set course. The number of needles, however, is quite immaterial, provided a sufficient number of points are taken. For charting a lawn 500 to 1,000 points are required. By recording every leaf hit, the relative percentage of each species of the turf may be ascertained.

Prof. H. B. Musser of the Pennsylvania Experiment Station used a modified apparatus to determine percentage composition of the grass species in mixed turf. The pins of his apparatus hit the vegetation at 45° instead of vertically.

At UCLA experimental turf plots, a lighter, modified form of Musser's apparatus is used for studies of grass mixtures. The apparatus (see figure) is made of light chrome arms and aluminum pins. The two horizontal arms are fixed very close to the lower end of the apparatus, and about 3 inches apart. The horizontal arms have holes 2 inches apart, and as many pins as needed can be hooked and rest on a piece of string in a way that, when not in use, the pointed edges are not touching the vegetation. By pressing lightly on the string, the pins are lowered and touch the vegetation. By releasing the pressure the pins are automatically raised up, and the apparatus is ready to be moved to another place for further recording of the vegetation.

ERRATUM

In the article on the "Control of Sod Webworms or Lawn Moths in Southern California" in the January, 1951 issue, Page 1, Paragraph 2, Line 10 under "Life History and Habits" should read: "There are 3 or 4 generations a year."