THE 1952 SOUTHERN CALIFORNIA CONFERENCE ON TURF CULTURE

MONDAY AND TUESDAY, OCTOBER 6, 7, 1952

Presented by

THE COLLEGE OF AGRICULTURE AND UNIVERSITY EXTENSION

UNIVERSITY OF CALIFORNIA, LOS ANGELES

PROGRAM

OCTOBER 6, 1952

9:30 - 11:30 a.m.

300 Veteran Avenue
West Los Angeles
Inspection of University Turf Plots

12:30 - 1:30 p.m.

Riviera Country Club
Sunset Blvd. and S. Capri Drive
West Los Angeles
Registration

1:30 p.m.

Presiding: Colin C. Simpson, Chairman
Turf Research Advisory Committee

Welcome: Robert W. Hodgson, Dean
College of Agriculture
University of California
Los Angeles

Introduction of Turf Research Advisory Committee: Colin C. Simpson

The Turf Program at Los Angeles -
Vernon T. Stoutemyer, Professor
Floriculture and Ornamental Horticulture,
UCLA

Development of the Extension Program in Turf Culture -
John J. McElroy, University of California,
Berkeley.

Kenneth Smoyer, Director, Agricultural Extension, Los Angeles County

The Midwest Regional Turf Program -
William H. Daniel, Agronomist in
Turf Research and Extension,
Purdue University, Lafayette, Indiana

3:15 Intermission

(TO BE CONTINUED ON PAGE 2)
3:30 p.m. The New Western States Regional Turf Program of the U.S. Golf Association Green Section - Charles G. Wilson, Regional Director U. S. Golf Assn. Green Section, Davis

4:00 p.m. New Ideas in Turf Culture - O. J. Noer, Agronomist Milwaukee Sewerage Commission

6:30 p.m. Dinner - Riviera Country Club

Panel Discussion and Question Period

Presiding: Charles G. Wilson, Regional Director U.S. Golf Association Green Section

Panel Members:
- O. J. Noer Boysie Day
- William Daniel Robert Hagan
- V. T. Stoutemyer 0. R. Lunt
- Kenneth Smoyer Pierre Miller
- Marston Kimball Thomas Mascaro

OCTOBER 7 - 9:30 a.m. Riviera Country Club

Presiding: Raymond Page, Secretary American Society of Landscape Architects Southern California Chapter, Los Angeles

Turf Pests: Weeds - Boysie E. Day, Asst. Plant Physiologist University of California, Riverside Diseases - Pierre Miller, Professor of Plant Pathology, UCLA

Soil and Water Problems - Robert M. Hagan, Assistant Professor of Irrigation, University of California, Davis

Soil Compaction - 0. R. Lunt, Instructor in Soils, UCLA

12:00 m. Luncheon

1:30 p.m.

Presiding: Fred Roewekamp, Park Development Supervisor and City Forester, City of Los Angeles

Factors affecting Depth of Rooting of Turf: O. J. Noer

Crabgrass and Clover Control in Turf: William H. Daniel

Intermission -

Turf for Athletic Fields and Playgrounds: Charles G. Wilson

Influence of Management on Turf Composition: V. T. Stoutemyer

An exhibit of turf weeds and turf weed control will be arranged at the Riviera Country Club.
TURF PROGRAM INCORPORATED IN UNIVERSITY BUDGET

This present year of 1952 should be considered a memorable milestone in the program in turf culture in California.

One important development, mentioned in our last issue, is the opening of the Western Regional Office of the U. S. Golf Association Green Section at 815 Oeste Drive, Davis, California, with Charles G. Wilson as director. The past assistance of the Green Section has been invaluable in establishing our experimental plot work on the Los Angeles Campus. This new regional office should help to place this area in the forefront of turf research.

Simultaneously, the experimental program on the Los Angeles Campus has been placed in the budget of the College of Agriculture for the first time, thus achieving, at least partially, the objectives of those who more than six years ago, decided that California deserved a turf research program comparable to some of those in the Eastern states.

The rapid progress which has been made thus far has been made possible by the long continued support of many individuals and organizations who raised funds to support an experimental program which demonstrated its value. This fine progress is a tribute particularly to the vision and leadership of Mr. Colin C. Simpson who, although actively engaged in both civic and private business duties, has given generously of his valuable time and organizing ability to the cause of turf culture in California.

We do not yet have a program comparable to that at Pennsylvania State College, but we are now on an equal footing with many of the other Stations doing work in this field. We should be able to look forward to a steady growth of the program here, and likewise a corresponding growth of the coordinated work on the Davis Campus may be expected.

RECENT GIFTS

Naugatuck Chemical Company
Naugatuck, Connecticut
5 lbs. maleic hydrazide

American Chemical Paint Company
Ambler, Pennsylvania
1 gal. Weedar MCP

E. I. DuPont de Nemours & Co.
Wilmington, Delaware
100 lbs. Uramite

Northrup, King & Company
Los Angeles
5 lbs. Goar's fescue seed

Germain's Inc.
4 lbs. Goar's fescue seed

Velsicol Corporation
Chicago
1 gal. Chlordane

An unusual number of experimental grass turf plots are being started in California by various groups and commercial firms. When properly managed, these may be expected to yield much valuable information. We shall be pleased to be informed of the locations of these plots, since they afford an excellent opportunity to persons in many parts of the state to see the newer and less common turf grasses.

TURF MEETINGS IN ORANGE COUNTY

The planting of experimental turf plots seems to be popular everywhere in California. Recently several plots were established in Orange County under the direction of Mr. A. H. Holland, Farm Advisor in the Agricultural Extension Service.

On Tuesday, July 17, informal extension meetings were held at two of these plots. The plots at Santa Ana College were in excellent condition - the plots of Merion bluegrass being notable. Here also, areas seeded with a low percentage of Merion bluegrass in mixture revealed a fair amount of the Merion bluegrass, and these trials will doubtless be followed with much interest later.

Among those discussing the plots were Mr. C. Gordon Wyckoff, Professor Pierre Miller and Dr. V. T. Stoutemyer from the Los Angeles Campus, and Mr. Charles Wilson of the U. S. Golf Association Green Section at Davis. About 40 persons attended the meeting.

A similar meeting was held at similar plots at Fullerton Junior College. This meeting was also attended by Mr. Marston H. Kimball and Mr. James A. Beutel of the Agricultural Extension Service in Los Angeles County.

We shall appreciate having telephone calls regarding turf problems kept to a minimum, since we do not have secretarial personnel at the location of the turf plots on 300 Veteran Avenue. In many instances, a letter can be handled with less loss of time.

The mixture of U-3 bermudagrass and Congressional bent grass, cut at putting green height, continues to be outstanding at all times of the year. Although some other strains of bermudagrass are superior to the U-3 in some particular respect, we believe that it remains the best general purpose strain for Southern California.
PATIENCE NEEDED TO SOLVE THE COMPACTION PROBLEM

John E. Gallagher, Jr.
Formerly Senior Laboratory Technician
University of California - Los Angeles

Today, many of our athletic fields, parks, and school playfields are from 10 to 20 years old. In that time soil compaction on those fields has developed into a severe problem. To expect a single annual aerification to undo the work of time, continuous use of the turf by players, and the compaction of heavy maintenance equipment, is to expect a miracle. Present day aerification equipment does seem to work miracles, but it takes time for these to happen.

All turf fields are not 20 years old; and many of them have not been over-watered or mismanaged, but most of them have been overworked by continuous activity, and all of them are compacted to some degree.

Compaction is a term applied to soil structure which has been compressed. This compression has reduced the number of pore spaces in the soil. The purpose of pore spaces is to act as channels for the movement of air and water. When the pore spaces are gone, water penetration is poor and air circulation is non-existent.

Compaction is caused by many forces. First, there is that of continuous wear--excessive use of the turf with no rest period allowed for normal growth. A second force is that of overwatering. The weight of water alone is sufficient to cause some compaction. When overwatering is combined with excessive use of the turf, compaction is accelerated. Finally, there is the demand for a close-cropped, tight turf which requires frequent use of heavy mowing equipment.

Compaction frequently starts the day the field is seeded. Heavy rollers are used to smooth out small irregularities and to put the seed in firm contact with the soil. The need for the field is so great that the area is opened for play long before it is ready. As a result, compaction is well started by the end of the first year. This usually is quite clearly indicated by the great percentage of shallow-rooted grasses such as crabgrass and annual bluegrass.

We have always had soil compaction in turf, but until a few years ago it was impossible to do anything really effective about it. There was no way to cultivate an established stand of turf without putting it out of play. Today there is available equipment which will completely cultivate a play field without interrupting its use. Many superintendents are now using such equipment and deriving full benefit from it, but unfortunately in this day of super chemicals and machines, some of us are expecting too much in too short a time. Aerification cannot correct the compaction of many years overnight. Aerification is not a substitute for good management, but along with fertilization, water and mowing maintenance, weed, insect and disease control, is just one part of a sound management program.

Once aerification is started, there are many visible indications of its work. The turf begins to green up and grow. Water runoff is less, and the field begins to have some resiliency. The ease in which the aerification equipment penetrates the soil gives some indication of its tillth.

Compacted soils resist penetration of the spoons or tines, while loose, friable soils readily admit them. As an illustration, here is an outline of the program followed by Mr. Carl A. Bloomfield, Supervisor of the Rose Bowl, using the Aerifier.

(4 times over in all cases)

First Use - May 15, 1950:
North, south and two diagonals Machine set for 1 1/2 inches Penetration: 1 inch.

Second Use - May 29, 1950:
Machine set for 2 inches Penetration: 2 inches.

Third Use - June 5, 1950:
Machine set for 3 inches Penetration: 2 1/2 to 2 3/4 inches.

(Fourth Use - July 10, 1950)

Fourth Use - July 10, 1350:
Machine set for 4 inches Penetration: 3 inches.

Fifth Use - July 17, 1950:
Machine set for 4 inches Penetration: 3 inches.

Sixth Use - August 1, 1950:
Machine set for 4 inches Penetration: 4 inches.

By having field cut to 1 1/2 to 1-3/4 inch settings, and proper moisture content (on the wet side), the aerifier has been working to maximum depth.

These results show clearly the need for patience in loosening the soil. Do not be discouraged if penetration is difficult in the first trials.

The aerifier is likewise a useful tool for the preparation of seed beds for grass. Sometimes it is run over the ground as many as six times. The aerifier holes seem to provide an ideal location for the germination of seed, as can be seen from the accompanying photograph taken on January 20, 1951, of the football field at Occidental College. This field was aerified and seeded to Alta fescue in early December. Similar experiences have been reported from various parts of the country.