

## ENERGY CAUSING RAIN DWARFS THAT OF HYDROGEN BOMB

Weather experts regard rainfall as the most important meteorological element.

Forces that make the hydrogen bomb seem feeble by comparison are utilized by the atmospheric engine that causes rain to fall.

Generally, it rains when moisture laden air rises and cools as it expands.

Damp air may ascend when it is heated by the sun, forced to follow an upward slope such as a mountain, or is compelled to surmount an intervening wedge of cold air.

### *Result of Collisions*

Most rain in Chicago and other middle latitudes of the earth is the result of warm and cold air collisions. However, the amount of rainfall is increased in areas where the warm air must climb an ascending terrain.

Heavy rain resulting from the forced rise of damp air over high ground is observed in the United States on the western slopes of the Rocky mountains and the southwest monsoon area of India. Rain falling on the lee slopes of mountains is never as heavy as that experienced on the windward slopes.

### *Never Rains in Antartic*

Peculiarly, it never rains in the antartic. Instead of rain, that land receives its only moisture in the form of a granular snow, called neve which must be melted before it can be used to quench the thirst.

Veteran explorers warn newcomers to Antartica never to put raw neve in their mouths. To do so will result in sores and abrasions from the coarse substance which is but another form of frozen rain.

### *Rainfall of Europe*

Over most of Europe the annual rainfall exceeds 20 inches, while it is less than 20 inches over most of Asia, excluding Ondia, Tibet, and China.

The annual precipitation in a long tongue of land extending from Arabia across to northeastern Mongolia is less than 10 inches. Less than 10 inches also fall yearly in a small area of Arizona, the central regions of Australia, and a section of southwestern Africa.

However, more than 100 inches of rain fall yearly along portions of the west coast of Africa from the equator to 10 degrees latitude north, in parts of Assam, and a costal strip of Burma.

### *List Record Rainfalls*

Following are some of the heaviest rainfalls recorded in a 24 hour period:

Berlin, April 14, 1902, 6.6 inches; Alexandria, Egypt, Dec. 9, 1888, 9.6 inches; Bruton, England, June 28, 1917, 9.7 inches; Cherrapunji, India, June 14, 1876, 41.4 inches; Baguio, Philippines, July 14-15, 1911, 46.7 inches, and Fiji, Aug. 8, 1906, 37.6 inches.

Probably the wettest spot on earth is Mount Waialeale in Hawaii, where the average annual rainfall from 1928 thru 1939 was 505 inches, while at Cherrapungi in Assam, an eastern province of India, 270 inches of rain fell in August, 1841.

Walter Kilmer at Ravisloe C C reports that the club is building a 54 ft. shelter house at the first tee. Walter is also installing a Ford Tractor motor in his old short coupled tractor to completely rehabilitate the outfit which has served the club so well in the past and is not replaceable.

## MIDWEST REGIONAL TURF CONFERENCE

March 7, 8, 9, 1955

### PRACTICES ARE INFLUENCED BY PRINCIPLES

The establishment and maintenance of quality turf ready for use requires a large number of practices. Mowing, watering, fertilizing, aerification, fungicide application and insect control on the putting green, the lawn or athletic field are a group of procedures. These procedures are practices attempting to follow principles which provide good turf.

When the problems and questions of each person attending are considered, that is also the time to consider the principle and why a practice is proposed. The individual managing turf areas can thus enlarge his concept and understanding.

A special thanks to the more than 50 persons appearing in the program to make this Conference a success. Everyone attending can, through his interest, enthusiasm and questions, make it a profitable Conference for himself and his organization.

### REGISTRATION AND FEES

Attendance is open to anyone interested in turf and its management. Registration will begin at 9:00 a.m., March 7. A fee of \$10 is payable now, which includes banquet ticket, proceedings and group picture. For further information write to:

W. H. Daniel, Department of Agronomy  
Purdue University Lafayette, Indiana

### WALKING TOUR

There will be a walking tour (six blocks) to the newly occupied Life Science Building and Greenhouse. The groups assemble at 10 or 11:00 a.m. in lobby opposite registration desk. Go out front door of Memorial Union to State Street, turn west (right), go past traffic light to new building on left. Enter by groups from west doors. Stops can be made to observe new office of Exec. Secy. of M.R.T.F. (Room 3S30, south corridor, third floor) and new lecture rooms.

In the greenhouse stops will be made at forage crops breeding, *Poa annua*, zoysia and crabgrass control experiments.

### MONDAY, MARCH 7

9:00 a.m. Registration begins—Foyer. Mrs. Kaye House—Office Secretary

10:00 a.m. Tour of New Life Science Bldg. and Greenhouse Experiments

Eugene Johanningsmeier, Field Technician  
Dick Craig—Senior, Turf Management

11:00 a.m. Second groups start above tour

12:00 Noon Luncheon for Chairmen and Marshals  
Chestnut Room—G. O. Mott, Treasurer, M.R.T.F.

### SOUTH BALLROOM

Chairman—Frank Dunlap, President M.R.T.F., Supt., The Country Club, Cleveland, Ohio

Marshal—Ward Cornwell, Vice-Pres., M.R.F.T., Supt., Supt., Lochmoor Country Club, Grosse Point Woods, Mich.

1:20 p.m. Welcome To The University—Dr. N. J. Volk, Associate Director Agricultural Experiment Station, Purdue

1:30 p.m. Plant Carbohydrates Must Balance Nitrogen—M. R. Teel, Instructor, Dept. of Agronomy, Purdue

2:05 p.m. Nutrient Absorption by Plants—Dr. J. R. Watson, Agronomist, Toro Manufacturing Co., Minneapolis, Minn.

2:30 p.m. Coffee served at break

2:50 p.m. The Students Purdue Serves—Prof. N. M. Parkhurst, Associate Registrar, Purdue

3:20 p.m. A Student Reports—G. W. Roach, Senior, Agronomy Major, President of Acacia Fraternity

- 3:30 p.m. Bentgrass Fairway Improvement—Dr. O. J. Noer, Agronomist, Milwaukee Sewerage Commission, Milwaukee, Wisc.  
My Experience with Improvements—A panel  
Ray Davis, Supt., North Shore C.C., Chicago, Ill.  
O. W. Young, Supt., Moraine Country Club, Dayton, Ohio  
Bert Rost, Supt., Park Ridge Country Club, Park Ridge, Ill.  
Harry Mesloh, Supt., Clovernook Country Club, Cincinnati, Ohio.
- 6:00 p.m. Banquet—North Ballroom  
Speaker—Prof. G. J. Mackey, Director of Athletics, Purdue  
Purdue Glee Club—A. P. Stewart, Director

TUESDAY, MARCH 8

DIVISION A

WEST FACULTY LOUNGE

- Athletic Fields, Nurseries, Cemeteries and Lawns  
Chairman—Oscar Borgmeier, George A. Davis Co., Inc., Chicago, Ill.  
Marshal—Horace Godwin, Manager, H. F. Godwin & Son, Detroit, Mich.
- 9:00 a.m. Merion Blue Grass Experiences  
C. Habenicht, Manager, H. & E. Sod Nursery, Tinley Park, Ill.  
P. E. Drachman, Lawnmower and Chairman, Evansville Country Club, Evansville, Ind.  
R. G. Hurst, Supt., University of Michigan Athletic Dept., Ann Arbor, Mich.  
H. H. Godwin, Manager, H. F. Godwin & Sons, Detroit, Mich.
- 9:40 a.m. What Mixture Grass Seed?  
J. R. Watson, Agronomist, Toro Manufacturing Co., Minneapolis, Minn.  
Joe Lentz, O. M. Scott Seed Co., Marysville, Ohio  
Harold Bohling, Landscape Nurseryman, Munster, Ind.
- 10:40 a.m. Break
- 11:00 a.m. Fertilizer Usage  
J. B. Kelly, Salesman, G. A. Davis Company, Chicago, Ill.  
Omar Ford, Fertilizer Testing, Department of Biochemistry, Purdue  
Dale T. Friday, Agronomist, Nitrogen Division, Allied Chemical & Dye Co., Indianapolis, Ind.  
O. J. Noer, Agronomist, Milwaukee Sewerage Commission Milwaukee, Wisc.  
Chairman—Calvin Covert, Supt. of Grounds, Woodward Governor Co., Rockford, Ill.
- 1:20 p.m. Weedy Grass Control Principles—Bruce Rogers, Department of Botany and Plant Pathology, Purdue
- 1:45 p.m. Crabgrass Control—Discussion for Group Leader—Dr. F. V. Grau, Agronomist, West Point Products Corporation, West Point, Penna.
- 2:20 p.m. Zoysia for Lawns and Nurseries  
W. H. Daniel, Turf Specialist, Purdue  
P. E. Drachman, Greens Chairman, Evansville Country Club, Evansville, Ind.  
M. H. Ferguson, Research Coordinator, Green Section, U.S.G.A., College Station, Tex.  
Frank Dinelli, Supt., Northmoor Country Club, Highland Park, Ill.
- 2:40 p.m. Break
- 3:00 p.m. What is your question?"

TUESDAY, MARCH 8

DIVISION B

Golf Courses

- Chairman—Marion Mendenhall, Supt., Kenwood Country Club, Cincinnati, Ohio

Marshall—Lester Verhaalen, Supt., Byrnwood Country Club, Milwaukee, Wisc.

- 9:00 a.m. Report on Experimental Green—Taylor Boyd, Supt., The Camargo Club, Cincinnati, Ohio
- 9:20 a.m. Disease Development is Slow—W. Klomprens, Research Pathologist, The Upjohn Company, Kalamazoo, Mich.
- 10:00 a.m. Chemical Principles in Weed Control—Bruce Rogers, Department of Botany and Plant Pathology, Purdue
- 10:20 a.m. Questions on Crabgrass—W. H. Daniel, Department of Agronomy, Purdue
- 10:40 a.m. Break
- 10:50 a.m. Progress in Poa Annuua—W. W. Amick  
W. H. Daniel, Department of Agronomy, Purdue
- 11:00 a.m. Preparing for Motorized Carts  
M. Ferguson, moderator—S. W. Regional Director, U. S. G. A., Green Section, College Station, Tex.  
J. Brandt, Supt., Danville Country Club, Danville, Ill.  
Carl Bretzlaff, Supt., Meridian Hills Country Club, Indianapolis, Ind.

(Comments and suggestions by others encouraged)

- Chairman—A. L. Michel, Mallinckrodt Chemical Co., St. Louis, Mo.
- Marshall—Ray Phillips, Supt., Louisville Country Club, Louisville, Ky.
- 1:20 p.m. Nitrogen Use and Why  
D. L. Likes, Supt., Hyde Park Country Club, Cincinnati, Ohio  
Colin Smith, Supt., Shaker Heights Country Club, Cleveland, Ohio  
Bob Williams, Supt. Beverly Country Club, Chicago, Ill.  
L. Huber, Supt. of Ohio State University Golf Course, Columbus, Ohio
- 2:40 p.m. Break
- 3:00 p.m. Labor Policies at My Course  
John McCoy, Supt., Cincinnati Country Club, Cincinnati, Ohio  
Don Strand, Supt., Westmoreland County Club, Skokie, Ill.  
E. Schneider, Supt., Evansville Country Club, Evansville, Ind.
- 3:30 p.m. Share the Question—Panel  
Henry Lange, Supt., Glen View Golf Club, Golf, Ill.  
Howard Gabby, Supt., Johnson Park Golf Club, Racine, Wisc.  
Mal McLaren, Supt., Oakwood Country Club, Cleveland, Ohio  
Al Linkogel, Manager, Link's Nursery, Creve Coeur, Mo.
- 7:00 p.m. Movies
- 8:00 p.m. Annual Meeting Midwest Regional Turf Foundation (Everyone invited). Meeting of Board of Directors follows.

WEDNESDAY, MARCH 9

- Chairman—Orville Hocker, Former Supt. of Parks, Dayton, Ohio
- 9:00 a.m. Research and Distribution of Pennlu—W. H. Daniel, Turf Specialist, Dept. of Agronomy, Purdue
- 9:20 a.m. Corrective Maintenance of Shrubs—H. W. Gilbert, Landscape Architect, Dept. of Horticulture, Purdue
- 10:00 a.m. Fulbrighting in Japan—Miss L. E. Rorabacher, Dept. of English, Purdue
- 10:40 a.m. Put Yourself in His Place—F. V. Grau, Agronomist, West Point Products Corporation, West Point, Penna.
- 11:30 a.m. Close of Conference
- 12:00 Noon Advisory Council Luncheon