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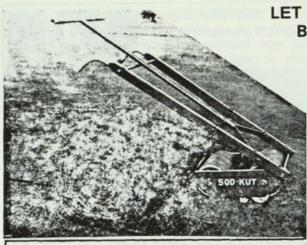
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ILLINOIS TURFGRASS FOUNDATION

Advanced Registration

December 12-14, 1978 19TH ANNUAL TURFGRASS CONFERENCE

at the Ramada Inn Champaign, Illinois

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Club or Firm	
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	_ I.T.F. Member \$25.00
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Please make checks payable to: Illinois Turfgrass Foundation. Mail to: 11020 S. Roberts Road, Palos Hills, Illinois 60465.

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11:15 - 11:40 a.m.

Irrigation Design and Renovation Concepts for Small-Scale Landscapes for Maximum Water Efficiency. Bruce Camenga, Manager, Technical Services, Riverside, California.

11:40 a.m.
Questions on Water and Water Management

TUESDAY, DECEMBER 12

8:00 a.m. - Registration - Ramada Inn Convention Center - Lobby

8:30 a.m. - Commercial Exhibits Open - University Hall and Midwest Ballrooms

1:00 p.m. - Commercial Exhibits Close

TURFGRASS WORKSHOP

First Session - 1:30 - 3:00 p.m.

- A. Sprayer Calibration Principles and Techniques
 Dr. Loren Bode, Department of Agricultural Engineering, U. of I.
- B. Seasonal Maintenance Programs for Professional Ornamental Care-Cultural Programs. Part 1.
 Dr. D. J. Williams and F. A. Giles, Department of Horticulture, U. of I.

Second Session Second Session - 3:00 - 4:30 p.m.

A. Warm Season Grasses — Selection and Establishment. Dr. Herb Portz, Department of Plant and Soil Sciences, S.I.U.

B. Seasonal Maintenance Programs for Professional Ornamental Care-Pest Programs. Part 2.

Dr. Roscoe Randell, Agricultural Entomology, U. of I., and Dr. Robert Partyka, Plant Diagnostic Laboratories, Chem-Lawn Corp., Worthington, Ohio.

4:30 - 7:30 p.m. Commercial Exhibits Open (cash bar)

7:30 - 8:30 p.m.
Illinois Turfgrass Foundation Business Meeting

8:30 p.m.

Illinois Pesticide Applicators and Operators Examinations

WEDNESDAY, DECEMBER 13 GENERAL RESEARCH SESSION

Moderator: Al Herbster, Superintendent of Grounds, University of Chicago, Chicago, Illinois.

Assistant: Bruce Branham, Graduate Research Assistant, Department of Horticulture, U. of I.

8:30 - 8:50 a.m.

How Turfgrass Insecticides Work and Use Considerations. Dr. Roscoe Randell, Agricultural Entomology, U. of I.

8:50 - 9:10 a.m.

How Turfgrass Fungicides Work and Use Considerations. Dr. Robert Partyka, Plant Diagnostic Laboratories, Chem-Lawn Corp., Worthington, Ohio.

9:10 - 9:30 a.m.

Compatability of Pesticides and Fertilizers and Tank Mixture Problems. Dr. Robert W. Miller, Vice-President, Chem-Lawn Corp., Atlanta, Georgia.

9:30 - 9:45 a.m.

Animal Pest Problems on Turfgrass Areas and Recommended Controls. Ron Ogden, Department of Fish and Wildlife, Springfield, Illinois.

9:45 - 10:00 a.m. - Break

10:00 - 10:20 a.m.

The Value of Soil Testing in Turfgrass Management. Dr. Gordon V. Johnson, Department of Agronomy, Oklahoma State University, Stillwater, Oklahoma.

10:20 - 10:40 a.m.

The Role of Micronutrients in Turfgrass Culture. Dr. George McVey, Research Agronomist, O.M. Scott & Sons, Marysville, Ohio.

10:40 - 11:00 a.m.

Educational Materials for Pesticide Use. Margaret Stephen and Dr. A. J. Turgeon, Department of Horticulture, U. of I.

11:00 - 1:00 p.m. Commercial Exhibits Open

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222 South Central Ave. St. Louis, Missouri 63105

GOLF TURF SESSION

Moderator: Dick Lamkey, Superintendent, Moon Lake Golf Course, and Pres., Northern Illinois Landscape Co., Hoffman Estates, Illinois.

Assistant: Karl Danneberger, Graduate Research Assistant, Department of Horticulture, U. of I.

1:30 - 1:50 p.m.

Ataenius Spretulus - St. Louis Style

Larry Runyan, Superintendent, Four Seasons Golf Course, Lake Ozark, Missouri.

1:50 - 2:15 p.m.

Design Concepts for Golf Course Renovation and Remodeling. Robert Trent Jones, Pres., Robert Trent Jones, Inc., Montclair, N.J.

2:15 - 2:40 p.m.

Misconceptions in Golf Green Construction. Jim Holmes, Greenmakers, Bryant, Texas.

2:40 - 2:55 p.m. - Break

2:55 - 3:20 p.m.

California's Approach to the Sand Topdressing Program. Dr. Victor A. Gibeault, Department of Environmental Horticulture, University of California, Riverside, California.

3:20 - 3:45 p.m.

Golf Course Problems — What's the Answer?

Dr. Jack D. Butler, Department of Horticulture,
Colorado State University, Fort Collins, Colorado.

3:45 - 4:05 p.m.

Selection of Mixtures and Blends for Sport Turf Establishment and Renovation. Dr. J. R. Street, Department of Horticulture, U. of I.

4:05 - 4:30 p.m.
Questions on Golf Course Problems

THURSDAY, DECEMBER 14 SYMPOSIUM — WATER AND WATER MANAGEMENT

8:30 - 8:55 a.m.

Water and Water Resources in Illinois — A Perspective Jack Roberts, State Water Survey, U. of I.

8:55 - 9:20 a.m.

Soil-Plant Water Relationships. Dr. L. A. Spomer, Department of Horticulture, U. of I.

9:20 - 9:45 a.m.

Drought Tolerance and Water Relationships of Turfgrasses. Dr. Jack D. Butler, Department of Horticulture, Colorado State University, Fort Collins, Col.

9:45 - 10:00 a.m. - Break

10:00 - 10:25 a.m.

Irrigation Management for Best Turf Performance and Water Efficiency — The California Problem. Dr. Victor A. Gibeault, Department of Environmental Horticulture, University of California, Riverside, California.

10:25 - 10:50 a.m.

The Use of Effluent Water for Golf Course Irrigation.

Dr. Gordon V. Johnson, Department of Agronomy,
Oklahoma State University, Stillwater, Oklahoma.

10:50 - 11:15 a.m.

Irrigation Design and Renovation Concepts for Large-Scale Landscapes for Maximum Water Efficiency. Thomas J. Schiltz, Director of Education, The Irrigation Association, Silver Spring, Maryland.

LAWN TURF SESSION

Moderator: John Latting, Professional Turf Specialties, Normal, Illinois. Assistant: Margaret Stephan, Graduate Research Assistant, Department of Horticulture, U. of I.

1:30 - 1:50 p.m.

The Lawn Care Industry — Present Problems and Future Perspectives. Dr. Robert W. Miller, Vice-President, Chem-Lawn Corp., Atlanta, Georgia.

1:50 - 2:15 p.m.

Removal of Nitrogen from Turf by Clipping Collection. Dr. James F. Wilkinson, Director of Research, Chem-Lawn Corp., Columbus, Ohio.

2:15 - 2:40 p.m.

The Application of Modern Marketing Techniques in a Lawn Care Business. Martin Erbaugh, Director of Marketing, Davey Tree Expert Co., Kent, Ohio.

2:40 - 2:55 p.m. - Break

2:55 - 3:20 p.m.

Advertising Techniques for the Lawn Care Industry.
Robert Early, Editor, Lawn Care Industry.

3:20 - 3:45 p.m.

Herbicides for the Lawn Care Industry and Use Considerations. Dr. A. J. Turgeon, Department of Horticulture, U. of I.

3:45 - 4:05 p.m.

Research Needs of the Lawn Care Industry. Dr. James F. Wilkinson, Director of Research, Chem-Lawn Corp., Columbus, Ohio.

4:05 - 4:30 p.m.

Questions on Lawn Care Problems

4:30 - 6:00 p.m. Commercial Exhibits Open

6:30 p.m. - Banquet

Moderator: Dave Fearis, President, Illinois Turfgrass Foundation and Superintendent, Country Club of Peoria, Peoria, Illinois.

Entertainment by the Young Illini, U. of I.

Speaker: Robert Trent Jones, Pres., Robert Trent Jones, Inc., Montclair, N. J. "Impressions of the first Russian Golf Course."

SOME PRINCIPLES OF DELEGATION

Dr. Thomas W. Simmerer Nation's Business, Feb., p. 55

Delegation is more than simply asking or telling others to do a job. It is the process of entrusting objective functions, authority, responsibility and accountability to subordinates. It involves taking some risk. Here are some principles to keep in mind: If something is to be done right, delegate. Do you have more work to do than time to do it in? What do you mean, my subordinates know more than I do? It's hard for some managers to face the fact that subordinates may have greater technical knowledge, and instead of using this talent, bury it and are resentful of it. What is this job all about? The first step in delegation is to entrust the subordinate with the objectives of the job; people must know why as well as how the job must be done. Identify subordinates who fear greater responsibility. Not everyone wants greater responsibility. It's important to be able to identify those who want to carry the ball and those who don't.

DON'T QUIT

When things go wrong, as they sometimes will, When the roads you're trudging seems all uphill, When the funds are low, and the debts are high, And you want to smile, but have to sigh, When care is pressing you down a bit, Rest if you must, but don't you quit. Life is queer with it's twists and turns, As everyone of us sometime learns. And many a fellow turns about. Whe he might have won had he stuck it out. Don't give up, though the pace seems slow-You may succeed with another blow. Often the goal is nearer than It seems to a faint and fulting man, Often the struggler has given up When he might have captured the victor's cup: And he learned too late when the night came down, How close he was to the golden crown. Success is failure turned inside out-The silver tint of the clouds of doubt. And you can never tell how close you are. It may be near, when it seems afar; So stick to the fight when you're hardest hit, It's when things seem worst that you mustn't quit.

Life is like a round of golf: as soon as we get out of one hole we head for another.



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From: Donald A. Hoffman Re: 1978 Golf Committee Report

For the 1978 Golf Season, the meetings of the MAGCS at which golf was played are as follows:

May - Woodridge GC - 33 players June - Old Elm GC - 71 players July - Lincolnshire CC - 51 players

August - III. Turfgrass Found., Indian Lakes CC September - McHenry CC, Annual Tourn. - 94 players

October - Joint meeting with Wis., Plum Tree National CC

A total of 248 players participated in the golf events. A breakdown by class of players is as follows:

A & AA - 136 B - 25 D - 14 E & EE - 38 G - 3 Guests - 32

Total - 248

The golf committee spent \$538.36 out of account. This primarily covered jackets, outside prizes, and trophies. This was supplemented by the \$4.00 paid by each player participating in the golf events. There were approximately \$2500.00 worth of prizes distributed at the golf events made possible through donations and discounts given in the pro shops. The golf committee also gave away 20 wall plaques.

1978 MAGCS Golf Team

Team Captain and MAGCS Champion

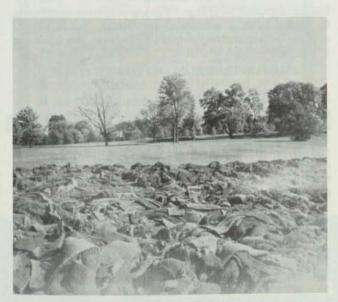
Robert Kronn

The following qualify for team membership by low gross scores:

Ken Goodman Doug Spaulding Bruce Burchfield Tim Miles

Anyone interested in representing the MAGCS Golf Team should contact Bob Kronn as soon as possible.

Donald A. Hoffman Golf Committee Chairman



If you don't like it, remove it. That is what they did at Chicago G.C. and replaced it with A20, 8,880 square yards.

INTERESTING FACTS

To find diameter of a circle multiply circumference by .31831.

To find circumference of a circle multiply diameter by 3.1416.

To find area of a circle multiply square of diameter by .7854.

To find surface of a ball multiply square of diameter by 3.1416.

To find side of an equal square multiply diameter by 8862

To find cubic inches in a ball multiply cube of diameter by .5236.

Doubling the diameter of a pipe increases its capacity four times.

Double riveting is from 16 to 20% stronger than single.

One cubic foot of anthracite coal weighs about 58 lbs.

One cubic foot of bituminous coal weighs from 47 to 50 lbs.

One ton of coal is equivalent to two cords of wood for steam purposes.

There are nine square feet of heating surface to each square foot of grate surface.



Mike Bavier, Supt. at Inverness C.C., Director of G.C.S.A.A. and a candidate for re-election in February 1979 in Atlanta, Georgia. Mike instructs a group of students on a "Basic Golf Course Maintenance Program" sponsored by the Chicago District Golf Association.

The lower picture shows students attending this meeting.



Dear Ray:

In view of your interest in turfgrass insects, I am sending you this letter to inform you of the fact that the 1978 Committee on Common Names of Insects, from the Entomological Society of America, has approved a common name for **Ataenius spretulus**. The approved name is "black turfgrass ataenius".

You may be interested in knowing that we have discovered another beetle that damages turf, at the same time Ataenius larvae do. This insect has been determined as Aphodius granarius. I found larvae of this species damaging turf in Boulder, Colorado and at two golf courses in Detroit, Michigan. At first glance, adults appear identical to Ataenius spretulus. The larvae of Aphodius are slightly larger and have a somewhat darker head capsule. The most outstanding identifying feature of the larvae is the V-shaped series of spines located in the raster. Another species, A. pardalis, also have these V-shaped paladia and is depicted in Paul Richter's book, "White Grubs and Their Allies". The latter species is not found in turf. I mention it so that you may look it up to get an idea of what the rastral pattern for A. granarius looks like. My suggestion to you would be that each time you come upon an infestation during June or July, which appears to be that of Ataenius, please check the larvae carefully to determine the possibility of the other species being present. I, and I am sure you too, would like to know the extent to which this insect occurs on golf courses or other turf areas. It has been collected from most states.

Hoping you had a good summer, I remain sincerely,
Harry D. Niemcyzk, Ph.D.
Professor of Turfgrass Entomology
Ohio Agricultural Research & Development Center
Wooster, Ohio 44691

SULFUR-THE FORGOTTEN TURF NUTRIENT

During the years 1957 through 1962 only 10 to 13 states were listed as having a sulfur deficiency in their soils. Today there are at least 29 states deficient in this amazing life giving element.

Sulfur is essential to the healthy growth of turf as well as all plants. Here are some of sulfur's benefits to turf.

1. Improves water penetration in soil.

- Increases availability of iron, manganese, copper, zinc, and boron to the plant.
- 3. Improves soil structure.

Enhances color.

Builds healthy protoplasm and plant tissue to help resist drought.

6. Promotes turf growth and density.

Aids the turf response when used in combination with nitrogen.

8. Helps keep alkalinity in balance.

9. Aids nitrogen release from organic matter.

10. Improves recuperation capacity.

WHY IS THERE AN INCREASED NEED FOR SULFUR NOW?

Substantial amounts of sulfur used to be in the air because of coal burning home furnaces. Sulfur would be carried to the soil and plants by rain. During the 50's as much as 200 lbs. of sulfur per acre would be included in the annual rainfall in the Chicago area while the rural areas of Kentucky only received 5 or 6 lbs. of sulfur annually. Today, because of very little sulfur coal burning and environmental controls elimi-

nating sulfur emissions the amount of sulfur returned to the soil in rainfall has been practically eliminated.

Before the popularity of today's high analysis plant food, most fertilizer had a high concentration of sulfur contributed by ingredients, such as ammonium sulfate, superphosphate, potassium sulfate, sul-po-mag. Because of lower costs and greater availability, higher analysis sources of nutrients are used containing little or no sulfur. As a consequence, two of the most important sources of sulfur that have been washed out of the air by rain and a normal ingredient in fertilizer have almost been eliminated.

The sulfur present in the soil is eventually used up or leached out. The more nitrogen used the more sulfur is needed for proper turf growth. Depleted sulfur must be replenished or severe turf damage can result. Here is a list of sulfur sources:

	AVERAGE FERTILIZER AND SULFUR CONTENT
	N-P-K-S
Elemental Sulfur	0-0-0-99
Sulfur-coated Urea	32-0-0-24
Ammonium Sulfate	21-0-0-24
Ferrous Sulfate	18% S, 21% Fe
Gypsum	20% Ca, 18% S
Potassium Magnesium Sulfate (Sul-po-mag)	0-0-22-18, 11% Mg.
Ferrous Ammonium Sulfate	16% S, 22% Fe
Potassium Sulfate	0-0-50 - 17% S
Superphosphate	0-22-0 - 18% Ca, 12% S

HOW MUCH SULFUR DOES TURF REQUIRE?

Normally grass contains as much sulfur as phosphorous. The more nitrogen that is fed phosphorous, potash and sulfur needed. For example, if 4 lbs. of nitrogen were fed each thousand sq. ft. of turf it would require more sulfur because of leaching tendencies.

CAN SULFUR BE TOXIC TO GRASS?

The major sulfur villain is sulfur dioxide usually produced by smelters. This atmospheric contamination can completely kill plants. It is rare that sulfur added to the soil will harm plants. However, in arid or poorly drained soils, high concentrations of sulfates can cause problems by making calcium unavailable.

SULFUR DEFICIENCIES

Plants deficient in sulfur have very similar symptoms to those with a nitrogen deficiency, yellowing of leaves, faint scorching of leaf tip continuously until the whole leaf withers and dies.

SULFUR IS NEEDED TO LOWER pH OR INCREASE SOIL ACIDITY

If your pH is 7 add 2 lbs. of sulfur per 100 sq. ft. for every ¾ degree of pH you want to decrease. For example, if your pH is 7, 2 lbs. of sulfur per 100 sq. ft. will bring your pH down to 6.5 and 4 lbs. of sulfur per 100 sq. ft. will bring the pH down to 6.0. In sand, cut these amounts by one third.

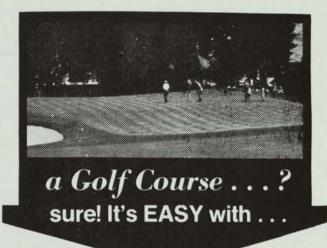
Never add sulfur or lime to correct pH until you have tested your soil and know what the pH is.

Reprinted from the New Hampshire Turf Talk Vol. 7, No. 1, Jan./Feb., 1977

This year's Seminar will be held at the Indian Lakes Country Club, Bloomingdale, IL on February 14, 15, 16, 1979. For further information contact Carole Rachesky at the **NEW ILCA office:** 665 Forest, Glen Ellyn, IL 60137 or phone 312—858-8574.

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