

SEPTEMBER, 1966
VOL. 20, NO. 3



The Bull Sheet

Official Bulletin

Midwest Association of Golf Course Superintendents

GOLF

DINNER

OCTOBER MEETING

**TUESDAY, OCTOBER 11, 1966
BUTTERFIELD COUNTRY CLUB
OAKBROOK, ILLINOIS**

EDUCATIONAL PROGRAM

BUSINESS MEETING

THE BULL SHEET, official publication of THE MIDWEST ASSOCIATION OF GOLF COURSE SUPERINTENDENTS.

DOUG JABAAY, Editor
P. O. Box 305
Naperville, Ill. 60540

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Superintendent Ham Hannemann of Rainbow Springs Country Club, Mukwonago, Wisconsin.

The President's Message

We have experienced one of the driest summers that anyone can remember and are now entering a fall that looks like it will be just as bad. The high drying winds that we had just accentuated the lack of moisture situation and all of us are faced with the hectic problem of pumping back some life's blood and renovating our poor turf. Besides the problems that nature offers to us, we have the ever increasing problem of obtaining and maintaining the proper labor force that is required. Golf course type labor continues to be hard to get, as well as, constantly increasing in cost.

Despite all our problems and the problems that exist, there are quite a few new courses being built in the area and the interest in golf continues to grow day by day.

We were pleased to see all of our Wisconsin friends at Rainbow Springs Country Club and extend our sincere appreciation to Ham Hannemann for being such a fine host. I was pleased to see such a good turn-out from both the Illinois and the Wisconsin side at this meeting.

We were very sorry and shocked to hear the tragic death of Bob Wren of Jacobsen Company. I know the members all join us in offering our deepest sympathy to Bob's wife and family.

Adolph Bertucci
President

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AUGUST MEETING

Rainbow Springs, the host club for our joint meeting with our Wisconsin friends, was quite a surprise to many of our 62 members that made the journey to the north. This complex of structures set in the natural beauty of nature in its finest is sure to be one of the most exciting resort areas in the midwest.

Ham Hannemann, the Superintendent of this new course, has certainly done a tremendous job. One thing is for sure, there weren't too many golf balls left in the bags after a round on this course—they can be found in the water. The use of only natural hazards, trees—shrubs, water—makes this a very unique course. It has a rating of one of the six hardest in the state of Wisconsin.

The championship is still held by the Midwest group, so Wisconsin will have to bring their best back to Illinois next year.

Management is to be commended on a delicious dinner enjoyed by over 160 people. A program by Dr. Eliot C. Roberts is in summary form on another page.

All told, those that made the sojourn to Wisconsin had a good time and will be back in two years.



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IOWA REPORTS ON RESEARCH WITH WETTING AGENTS

by Dr. Eliot C. Roberts
Professor of Agronomy and Horticulture
Iowa State University
Ames, Iowa

It's a fact. High quality irrigation water is becoming harder to get for use on turf. Golf course superintendents as well as other turf managers are concerned with making best use of the water available. Where soils have become compacted and hard to wet or where thrtch layers slow down moisture penetration, wettin agents or surfactants have been used to increase rates of moisture infiltration. Many turf managers rely on these materials and include their regular use as a part of their maintenance programs. Others have found little value from use of wetting agents and have resorted to other methods (aerification, spiking and vertical thinning of turf) to help improve moisture penetration into the turf and soil.

Because of the importance of any and all information on watering and water use by turf, a research project was established at Iowa State University in 1962 to investigate the effect of surfactant use on growth of turfgrasses. Both field and greenhouse experiments have been conducted using Penncross and Seaside creeping bentgrasses, Astoria Colonial bentgrass and Common Kentucky bluegrass. Bentgrass plots have been maintained as putting greens and bluegrass turf clipped at a 1 1/2 inch height and maintained under lawn conditions. Soils have varied from very sandy to silty clay loams. Results of these studies are summarized briefly as follows:

Aqua-Gro, All-Wet, Pro-Green and Solar-25 wetting agents were applied at rates less than, equivalent to, and greater than manufacturer's recommendations. Treatments were made monthly throughout the growth season. No effect either beneficial or detrimental was noted on the production of high quality turf or on moisture relations under field plot conditions.

When the same 4 surfactants were added to a standard nutrient solution and the turf grown free from soil in a hydroponics system, increasing concentrations of surfactant caused production of yellow (Chlorotic) foliage and reduced growth of leaves. As surfactant level increased in the treatment, copper and zinc concentration increased in leaf tissue. These increases were found to be great enough to create toxic conditions within the turf. It was obvious that there was a striking difference between the lack of response obtained in soil and the injury obtained in solution culture. Thus a third experiment was set up to determine what happens to the surfactant under soil conditions that prevents the type of injury noted in solution culture experiments.

Results of this study indicated that even where very high concentrations of wettin agen were applied to turf, over varying lengths of time, none could be leached out of the soil. Either these materials were decomposed very rapidly or they were attached to soil particles through polar attractions. Absorption in the soil system seems a most likely explanation for this immobility of the surfactant molecule. Thus, it appears that wetting agents, even though non-ionic, may through polar attractions be quickly tied up near the soil surface. In this way injury to turfgrass may be prevented. It is also likely

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that the surface active or wetting properties of the soil water are in large measure reduced in this process.

It is important to note here that soils may be divided into 2 groups—those that wet easily and those that are difficult to wet. The surfactant is only of value on soils which are difficult to wet. It is not clear how frequently "difficult to wet" soils occur under turf conditions. In addition, the tie-up of the surfactant in these soils would indicate an accumulation in upper layers and the need for frequent light applications for any improvement in moisture penetration over a period of time.

In light of this information, it would seem desirable to carefully study and evaluate field results from use of surfactants. Injury to turf appears unlikely except where soils are very sandy; under these conditions soils should not need a surfactant to improve wetting. Lack of response from the wetting agent may result from its rapid deactivation in the soil. Where response is satisfactory the surfactant is effectively getting to hard to wet soil particles. Evaluate your turf response and plan for next year accordingly.

THE NATIONAL GOLF FOUNDATION

ITS PURPOSE — ITS PROGRAMS

By Harry C. Eckhoff
Executive Director

National Golf Foundation Membership

There are two types of NGF memberships — (1) Sponsor Members and (2) Associate Members.

Sponsor Membership. Numerous manufacturers, distributors, suppliers, architects, golf course builders and others interested in the development of golf have become Sponsor Members of the Foundation in order to keep abreast of the nation's golf planning needs and receive information and services that will enhance a sound and continued growth of golf.

Among the services received by Sponsor Members is the Foundation's monthly **Golf Market Report** which lists the new courses opened for play during the month, courses on which construction began and a listing of all individuals requesting assistance during the month on proposed new golf ventures—with complete addresses. During the first six months of the current fiscal year, NGF Sponsor Memberships increased over 20%. For information on annual fee schedules for Sponsor Membership, write the Foundation's headquarters, 804 Merchandise Mart, Chicago, Illinois 60654.

Associate Membership. In late 1965 the National Golf Foundation established an Associate Membership for the nation's country clubs and golf courses in order that they too might become more aware of the Foundation's activities and actively participate in the development of the country's most rapidly growing competitive sport—GOLF.

The response to the invitations to Associate Membership has been outstanding. In addition to aiding the Foundation with its expanding programs of golf promotion, development and education, Associate Members receive gratis a variety of services, publications and releases on various phases of golf growth and development. This membership is available to any golf course in the United States. The annual fee is \$25.00.

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sporting goods according to the Athletic Goods Manufacturers Association Census Report for 1965. On the basis of manufacturer's selling prices, golf equipment sales in 1965 totalled \$139,998,552—a 9.3% increase over 1964's total of \$128,249,046.

Since 1958—only seven years—golf equipment sales have more than doubled in value. Growth has been consistent. In 1964 sales increased 7.4% over 1963 which in turn had been 8.1% ahead of 1962. Golf equipment sales in 1965 accounted for 51.4% of the nation's total athletic and sporting goods sales of \$271,776,69\$. In 1964 golf sales were 51.2% of this total; in 1963—47.4%.

A breakdown of certain golf equipment sales as reported by the Athletic Goods Manufacturers Association for 1965 follows:

Item	Unit		Value
	Measure	Quantity	
Golf Clubs	each	11,541,744	\$77,947,548
Golf Balls	dozen	7,272,120	\$49,631,851
Golf Bags	each	951,434	\$10,718,599

What's Ahead

Golf has had its greatest growth in the United States during the past fifteen years. Since 1950, golfers have more than doubled. National Golf Foundation records at the end of 1965 indicate a 113% increase in golfers over 1950. The estimated number of golfers per 100 population in 1950 was 22. Today—15 years later—it is 45 per 1000. Golfers have been increasing at the rate of over 10% annually in recent years.

All indications are that golf will grow even faster during the years ahead. The nation's population is expected to increase another 26% by 1980—about

50 million more people. Incomes will tend to increase according to present predictions. The typical family's buying power has already increased well over half in the past ten years. By 1980 it is expected to again do so and three times as many families are expected to enjoy annual incomes of \$15,000 or more.

For numerous reasons productivity of the work force is becoming such that leisure time is increasing and work time is decreasing. The shorter work week, longer vacations, earlier retirements, living conveniences which save time at home, are all realities today and will be more so in the future. Golf—a game that can be enjoyed during one's entire lifetime—will continue to attract players from every economic level of American life.

Golf course development in recent years is the most tangible and convincing proof of the extent and stable nature of golf's growth.

The Foundation's goal for the nation by 1970—over 10 million golfers and 10,000 golf courses for them to play on!

COMING EVENTS

- Illinois Turfgrass Conference** — Dec. 1-2, 1966.
Held at Urbana, Illinois.
- Roseman Field Day** — Monday, Oct. 3, 1966
Held at Brookwood Country Club.

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TIPS ON BUYING QUALITY STOCK

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There are several different sources from which golf courses can purchase top quality nursery stock. These sources include local nurserymen, mail order nurserymen and reliable nursery agents.

What should you look for in purchasing plants? Five guides have been designed by the American Association of Nurserymen to help assure satisfaction.

1. Select a reliable source, or sources, of supply and stick with it.

If this first rule is observed, there often is no other need to adhere to the remaining rules. The reputations of local or mail order, or agent nurserymen are generally known by one's neighbors and can be checked easily. The American Association of Nurserymen's seal is helpful, since the group's members generally are the industry's leaders.

2. Beware of extraordinary claims, both advertising as well as oral claims. A tree will not, unless the structure happens to be a doghouse, grow "roof high in one season." The range of growth for trees in one year is from a few inches to perhaps a maximum of four or five feet. Question anything that is advertised as growing more than four feet in a single year. It will be easy to check growth claims with nurserymen you know, arboretum or park authorities, etc.

3. There is a wide range in the number of flowers produced by plants. Some flowering trees or shrubs will produce thousands of blooms. Watch for such exaggerated claims. "Many bushels of fruit, the very first year" is patently false.

It is general practice to show trees or shrubs in bloom or in fruit at maturity. This is so you can visualize what the tree will look like when fully grown. Obviously such a tree cannot be transported or shipped to you, except at considerable cost. You will therefore receive a shrub or tree that is from two to 10 years old. If planted according to instructions it will in time grow to look like the specimen, which may take another two, or even 20 or 30 years or more, depending on the species. Trees and shrubs vary tremendously in many ways, growth rate, number and size of flowers, fruits, etc., but usually one can detect outlandish claims if he looks for them.

4. There are "bargains" in nursery stock, as with everything else. Obviously, however, a very small seedling size rooted cutting can sell at a lower price than the usual landscape size tree or shrub that has been given years of care before placing it on the market. If you have any doubts about the age, size, or quality, inquire before purchasing. Ask about their size and if the plants adhere to AAN standards. If not, do some checking.

5. There are new discoveries in plants each year, such as new varieties of roses, camellias, dogwoods and similar plants. There are almost no discoveries of "entirely new plants," however. So if you see an "amazing" or "fabulous new plant" advertised, check before you buy.

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ROSEMAN FIELD DAY

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Ford tractors, Roseman mowers, West Point aerifying equipment, Lely Fertilizer spreaders, National Triplex mowers, Woods mulchers, and Arps Trenchers will be among the items shown.

Demonstrations will begin at 10 A.M. Lunch will be served at 12 noon.



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