

JAMES B. BEARD CROPS DEPT. MICHIGAN STATE UNIV.

# A Patch of Green

Official Publication of the Michigan & Border Cities Golf Course Superintendents Association

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# President's Message

The 42nd Annual International Turfgrass Conference and Show of the GCSAA was successfully held at the Currigan Convention Center in Denver, Colorado. In our history of these conventions this marks the first to be held in Denver; however, I doubt if it will be the last. Our thanks are extended to Greens Superintendent Larry Eggleston of Cherry Hills Country Club in Englewood, Colorado, for the fine job he performed as host. This was a well planned and executed program.

The only negative vein that bears

comment was the absence of some of the large equipment manufacturers. Next time check your inventory to see if you have enough new tractors on hand. My personal congrat-



ulations to our members for the excellent representation in Denver of our fine organization. This does much to show our intentions for future programming as well as cultivating the ideas and educational data we receive through our participation.

In retrospect I am sure we can all reminisce about the hospitality, accom-



NATIONAL CHEMSEARCH CORP. 589 Abington Road Birmingham, Michigan 626 - 1111 modations and food. These items certainly are necessary for a successful and lasting impression on those in attendance. We thank Denver and the fine people involved in this undertaking.

Speaking of fine people and jobs well done - we can all have a good word for our delegate at large Bob Hope. Thanks Bob!

The conference was officiallt opened and welcomed to Denver by the good Governor John Love. This is appreciated for numerous gratefully reasons. Singely it represents recognitions that is due our profession. The importance we have in the total community is taking on more and more responsibility as time goes on. As recreation time increases throughout our country, it can be readily seen that our problems will have to be met with more stress on the educational factors presented to us now. The program and theme of education throughout the 42nd annual convention featured Pesticides. Irrigation and Budgets - which spotlights the fact that this is a profession and one that has little room for the nonlearner.

Welcome home gentlemen! Good luck in the application of what you have been exposed to in the approaching season.

Congratulations to members Leo Johnson and Joe Szilagyi who naturally don't need introductions, for their entry into the *Quarter Century Club*. May we all be members someday.

May all your grass and money be plentiful, the right kind and color - and may all your members' putts break six inches straight down at - The End.

Sincerely,

Ward Swanson, President

## **Snow And Ice Removal**

from

"Winter Injury" By Milwaukee Sewerage Commission, Bulletin No. 5

Even though we need and like snow cover, there is a time to get rid of most of it and this should be done before it melts to form an ice sheet in the spring. Dr. Beard isn't sure how much is too much, and until his extensive research proves otherwise, he is advising Michigan Superintendents to remove all but one inch of ice or snow from March on. Incidentally, snow fence is also used to keep snow away from areas that would otherwise be too heavily blanketed.

Dr. Beard is particularly concerned about too much water in the crown area of the plant. In his work so far, cold tolerance hardiness is related more to crown tissue hydration (water content) than any other factor. Beard maintains if the crown comes through the winter in good shape we can lose all the roots and still get recovery. Conversely, if the crown is too wet, and thus not hardy, the condition of the roots and leaves makes no difference. The turf may die, even under moderate cold temperature, following "green up" in the spring.

Interestingly, he has good correlation data to back up his theory. For example, the least cold tolerant grasses like Poa annua, the creeping red or Chewings fescues, and the more bunch type colonial bentgrasses have the highest hydration (percent water in the crown) as winter approaches. His theory also helps to explain why the drainage swales and cupping areas, or areas that are heavily thatched and thus tend to hold water, suffer the most often from ice sheet injury.

It may also explain why a weak grass with high crown moisture content will survive over one winter and be clobbered the next. The critical point probably can be traced to the type of winter experienced. If the soil



Ice and snow removal from #1 green at ( Hills Country Club for rapid drainage of from the green surface.

freezes solid in the fall and stays that way all winter with some snow cover to prevent desiccation and insulate against too much cold, survival will be high even for weak grass. But, when we get quick freezes followed by sudden thaws, then more freezes and thawing to increase moisture in the crown area, we can expect injury on even the highly cold tolerant creeping bents.

Editor's notes: The above comment prompted Dr. Beard to call some of the area Superintendents last month when we had the big thaw and rain. He was concerned about the standing water on the greens. His advice was to remove as much of the snow from the fronts of the greens as was possible to allow the excessive water to drain off the green. Many of us sent our crews out the next morning to remove the snow and ice from the greens. Our many thanks to Dr. Beard for his concern.

Meet the Board



This month we feature Ted Woehrle, Vice President, Michigan & Border Cities Golf Course Superintendents Association.

Ted, came to us in 1968 from Beverly

Ted Woehrle Country Club, Chicago, where he spent nine years as Superintendent.

## Summer Warning

From An Article Presented At Purdue University, 1970 by C. Y. Ward

Frequent close clipping and nitrogen fertilization deplete carbohydrate reserves in grass tissue. It is believed that too much nitrogen weakens grass plants by stimulating excessive growth at the expense of reserve carbohydrates. Plants weakened in this manner are highly vulnerable to disease or other stress factors.

Turfgrass managers of cool season turfgrasses are cautioned against the use of large amounts of nitrogen on turf during the hot summer season. Since close, frequent clippings reduces carbohydrate reserves, a more lax mowing regime is in order during periods of excessive heat or turf injury. For example, if you are mowing greens daily at 3/16 inch, it would aid the grass to raise the height of cut to 1/4inch, and occasionally allow two days between mowings. This will allow for more leaf tissue to become active in photosynthesis and give it more time to accumulate increased reserves. The amount of increase may be slight, but a small difference may enable the turf to survive the rigors of a tournament, or a week of above normal temperature.

His background started on a course in Kankakee, Illinois, in 1946 working for his father. He graduated from Purdue University in 1954 with a B.S. in Agronomy. After spending two years in the Army he returned to civilian life working for Bob Williams at the Beverly Country Club as Bob's assistant. During the winter months he went to Florida and worked at the Country Club of Florida, Delray Beach, Florida under Norm Johnson.

In 1957 Ted became Superintendent of the Point-O-Woods Country Club, Benton Harbor, Michigan. He worked as Superintendent during the final stages of construction and then stayed on for one full year before returning to Beverly Country Club as Superintendent.

During this period Ted was president of the Midwest Association of Golf Course Superintendents in 1951, president of the Illinois Turfgrass Foundation in 1964 and 1965, editor of the "Bull Sheet" (publication of the Midwest) 1960 to 1965, president of the Midwest Regional Turf Foundation 1970, director of the Michigan Turfgrass Foundation at present.

Ted resides in Troy, Michigan with his wife Mary and their four children.

Presently he is Superintendent of the Oakland Hills Country Club, Birmingham, Michigan.



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## GCSAA Scholarship & Outstanding Senior Awards

Recipients of this year's GCSAA Scholarships were Stephen Stewart, Carl Bennett, Merrill Fullmer and Gregory Chipley. The scholarships were awarded by Norman Kramer, President of the GCSAA. James Smith, director of the Michigan Turfgrass Foundation, presented Joe Yoder the "Outstanding Senior" award, which is awarded for leadership and scholastic ability.

The surprise of the meeting came when Joe Yoder in turn presented John King, formerly of Michigan State with an award in appreciation for his work as Student Coordinator for the turf students while he was on the staff at MSU.





Left to Right: Top Row; Stephan A. Stewart, Carl Bennett and Norman Kramer, President of GCSAA. Bottom Row; Merrill P. Fullmer and Gregory W. Chipley.

Joe Yoder, center receiving the "Outstanding Student Award" from James Smith, right, Director of the Michigan Turfgrass Foundation, as Norman Kramer, left, President of the GCSAA looks on.

## 41st. Annual Michigan Turfgrass Conference

The 41st Annual Michigan Turfgrass Conference was a hugh success despite the severe blizzard on the morning of January 26th. The snow slowed down the registration the first morning but by the time the conference was over 515 interested turf managers had registered.

Two members of the Michigan and Border Cities Golf Course Superintendents Association were elected to the Board of Directors of the Michigan Turfgrass Foundation. Gary Bartsch, Superintendent of Pine Lake Country Club and George Priestkorn, Superintendent of Burroughs Farm Golf Club were elected along with Robert Knoll, White Chapel Memorial Cemetery of Troy, Michigan to three year terms.

During the Board meeting, held after the elections, the Board voted to office as President, James Armstrong of the J. D. Armstrong Landscape, Fraser, Michigan and Clem Wolfrom, Superintendent, Detroit Golf Club, as Vice President.

## **Toxicity Ratings**

All pesticides have a toxicity rating.

An acute oral toxicity rating for each insecticide is given and also a dermal toxicity rating if known. Acute oral toxicity ratings are usually obtained by feeding white rats, and acute dermal ratings are determined by skin absorption tests on rats or rabbits. These figures are expressed as LD50. This means the size of the dose which is lethal to 50 per cent of the test animals. LD50 is expressed in terms of milligrams of actual insecticide per kilogram of body weight of the test animal - mg./kg.

To express toxicity in practical terms the factor .003 times the LD50 value will give ounces of actual insecticide required to be lethal to a 187 pound man or other warm-blooded animal. As an example the oral LD50 value for malathion is 1200 mg./kg.; thus, if a group of men each weighing 187 pounds ate 3.6 ounces (1200 times .003) of actual malathion per man, onehalf of them would succumb. The dermal toxicity LD50 value of malathion is approximately 4000 mg./kg. or for a 187 pound man, 12 ounces. If you check the list of insecticides you will find some highly toxic chemicals with LD50 values from 1 to 10 mg./kg. For the average man, fatal doses of these would be in the range of .003-.03 ounce.

By comparison the oral LD50 value af aspirin is 1200 mg./kg. or 3.6 ounces per 187 pound man, the equivalent of malathion. The oral LD50 value of ethyl achohol is 4500 mg./kg. if a group of 187 pound men each consumed somewhat more than 1 quart of 80 proof whiskey in 45 minutes they would not only be intoxicated, 50 per cent of them might die.

It is important to remember that these toxicity ratings of each in secticide listed are approximate and pertain to white rats and sometimes rabbits. Such ratings do serve as a guide to compare the toxicity of insecticides as well as an indication of their comparative acute toxicity to other warmblooded animals and man. Acute toxicity ratings expressed as LD50 are classified as to their relative danger when being used. An LD50 of 750 mg./ kg. or higher is rated as low toxicity, LD50 rating of 150-750 is moderate, 50-150 is moderately high and 50 or less is very high.



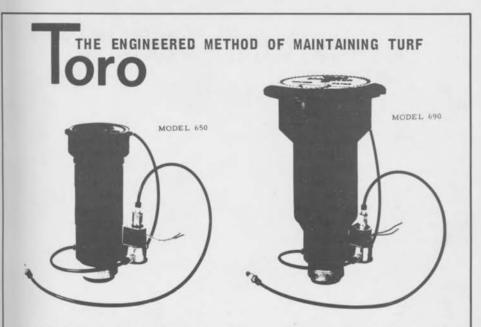
## Midwest Turf Foundation Officals

The recent Midwest Regional Tur Foundation at Purdue University attracted over 700 attendants from a multistate region.

The Midwest Regional Turf Foundation, co-sponsors of the conference along with Purdue University, elected the following officers for 1971:

President: John Dunlap, Oarwood Club. Cleveland; Vice President: Louis Miller, Louisville C.C., Louisville. Ky.; Executive Secretary; Dr. W. H. Daniel, Purdue University.

Directors: Our own James Timmerman. Orchard Lake Country Club, Orchard Lake, Michigan; Dudley Smith, Silver Lake Golf Club, Orland Park, Illinois; David Fearis, Mt. Hawley Country Club, Peoria, Illinois.



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## Michigan **Turfgrass** Foundation

#### Is your club a member of the Michigan Turfgrass Foundation?

Founded in 1956, the purpose of the Foundation is to provide funds for supporting a program of research and education in turfgrass in the State of Michigan. A major goal is to promote and advance the interests of its members as growers of turfgrass as well as those associated industries which are involved in the improvement of turfgrasses and turfgrass management.

Nearly \$100,000 have been provided by the Foundation in research grants. This support has been a major factor in the development of Michigan State University as a productive turfgrass educational and research center. Over 200 clubs, forms, sod interests and individuals have contributed. Periodic research reviews and informational publications are provided to members; approximately nine such mailings have been made during 1970. An annual Turfgrass Conference in January each year at MSU is a source of advanced turfgrass information.

Membership is \$40 per year for 18 or more hole golf clubs and \$25 for courses with nine holes.

If you are not a member, an invitation is extended for 1971. You may use the form below:

(Make checks payable to Michigan Turfgrass Foundation and mail to Michigan Turfgrass Foundation, Department of Crop and Soil Sciences, Michigan State University, East Lansing, Michigan 48823).

## **Tentative Dates**

APRIL 13 Dominion Golf Club, Windsor, Ont. Daniel Uzelac, Superintendent

MAY 4 Grosse Ile Jack Lorenz, Superintendent

MAY 24

Plum Hollow Ward Swanson, Superintendent

JUNE

Joint Meeting - Northern Ohio Highland Meadows Golf Club Sylvania, Ohio Don Ross, Superintendent

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**Charles** Croley

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# Lightning

Lightning is a unique phenomenon that we, in our combined fear and ignorance of it, have tended to ignore; but since it has been estimated that 1,800 lightning storms are in progress over the surface of the earth at any given mement; and because the electrical discharges that are occuring during these storms are known to strike the earth an average of 100 times per second, I'm wondering if we can.

I say this, because I know that lightning is caused by the vigorous movement of the cloud formations where, when the accumulated electrical energy exceeds the insulated strength of the air, it releases the same; and as it does, it sends it crashing to the earth where it's strength is dissipated in a manner that parallels the ending effects of a rising musical crescendo.

We then, in attempting to isolate and define the effects of this tumultuous release of energy, have found that as it strikes the earth it has a sinusoidal pattern that contains from one to 42 electrical impluses, in which the amplitude of the leading impluse has a current carrying capacity that sometimes reaches 100,000 amperes; and that the time between each impluse is usually around 60 millisecs (100,000th of a second). All of which means that if we could in some way harness the power reserves contained in just two strokes of lightning, we would have accumulated enough electrical energy to provide for the simultaneous operation of six 100 watt bulbs for a full year,

The Michigan and Border Cities Golf Course Superintendents Association have extended an invitation to the GCSAA to hold the 1978 International Turfgrass Conference and Show in Detroit. The last time the Convention was held in Detroit was 1948, a long thirty year span.

#### By Walter J. Wilkie, March Irrigation & Supply Company

Accordingly, if we were to equate all of this to the fact that we know that, in any wiring system, the amplitude of the surge voltage that can be induced into the electrical equipment by lightning is:

1. Directly proportional to the area of the wire loop of the wiring system servicing this equipment.

2. Inversely proportional to the distance of the strike from the wire loop of the wiring system.

3. Directly proportional to the maximum amount of current in the lightning discharge.

We would have to conclude that in the case of an automatic underground sprinkler irrigation system, protection of the control equipment is essential. Thus, the reason, I'm sure, that researchers are attributing more and more of the damage that is being caused to electrical systems to lightning; for as the above shows, lightning can induce the damaging effects of a voltage surge into the wireloop of a wiring system that is more than three miles away from the control equipment it services.

This is why numerous types of lightning protection devices have been developed to give this kind of protection; but since the Arc Discharge Type has proven itself to be the most reliable when equated in terms of response time, power handling capacity, ruggedness, cost and ease of maintenance, it's the one we would suggest you use. For here, when a voltage surge of sufficient magnitude occurs between the electrodes, an ionization of the pressurized gap takes place between the same which results in a low resistance and high current carrying path to ground. This then dissipates the excess electrical energy and allows the device to automatically reset after the arc is over; and to again be ready to give you protection from the inevitable - damage caused by lightning.



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## Meritorious Service Award

This year's recipient of the Meritor ious Service Award, presented by President Frank Forier of the Michigan Turfgrass Foundation, was the late George Priestkorn. Accepting the awar for his father was his son George Priestkorn. Because of the tremendous amount of work done through the early years of the Turf Foundation supporting the first golf outing for raising money and all the work done by George in training the young men in the profession it was a unanimous decision in selecting him for this honor.

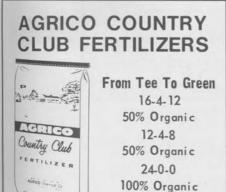
George Priestkorn's name will join the list of Dr. James Tyson, Charles Chapman, Clarence Wolfrom and Dr. Kenyon Payne as those who have made outastanding contributions in our field.

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## Area Members Win National Golf Tournament

Bob Priestkorn, Superintendent of Western Golf Club, won the Seniors Division of the GCSAA Golf Tournament in Phoenix, Arizona. This is the third time in four years that Bob has won this event. This should retire the trophy. Congratulations! Bob wasn't the only winner in Phoenix. Bob Fauteck, Sales Manager of the C. E. Anderson Company won his division of the tournament also. Our team came close, but we needed a few more long putts to win.



Bob Priestkorn

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Golfdom	Golfdom Circulation Dept. 235 E. 45th Street New York, New York 10017	12	\$5**	Golf business to include the professional golfer and golf course superin- tendents.	
The Golf Superintendent	The Golf Superintendent 3158 Des Plaines Avenue Des Plaines, Illinois 60018	10	\$5	Golf Course management an turfgrass scient	
Grounds Maintenance	Intertec Publishing Corp. 1014 Wyandotte Street Kansas City, Missouri 64015	12	\$12**	*** Landscape des construction an maintenance.	
Southern Golf Course Operations	Turfgrass Publications, Inc. P. O. Box 51088 Jacksonville Beach, Fla. 32250	4	\$3	Emphasis on bermudas and other warm season grasses	
Turf Grass Times	Turf-Grass Publications, Inc. P. O. Box 51088 Jacksonville Beach, Fla. 32250	8	\$5	General turf grass industry.	
USGA Green Section Record	United States Golf Assn. 40 East 38th Street New York, New York 10016	6	\$2	Golf course construction manitenance an management.	
Weed, Trees & Turf	The Harvest Publishing Co. 9800 Detroit Avenue Cleveland, Ohio 44102 Attention: Circulation Dept.	12	\$7**	Methods, chemicals and equipment for vegetation maintenance and control.	

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