Tee to Green

ol. VI, No. 7 Published monthly by the Metropolitan Golf Course Superintendents Association August, 1976

EETING NOTICE:

ate: September 13, 1976
ace: Whippoorwill Club
vent: Lawrence Labriola Memorial Tournament sponsored by M.G.C.S.A.
olf: 8 AM to 3 PM
Prizes for Class A Superintendents
Prizes for all other guests
Bring your own caddies
ocktails: 6 PM
inner: 7 PM
ate: September 30, 1976
lace: The Apawamis Club
vent: Superintendents Invitational Tournament
uncheon: Buffet in grill room
olf: Shotgun at 1 PM 36 team limit
ocktails: 6:30 PM to 7:30 PM
inner: 7:30 PM
ote: All Commercial, B or other A members who wish to attend please call Garry Crothers—967-8191 in regard to dinner reservations. Everybody must have a reservation.

OMING EVENTS:

eptember 13: Lawrence Labriola Memorial Tournament, Whippoorwill
eptember 16: New Jersey Turfgrass Association, Outing All M.G.C.S.A. members invited to a day at Monmouth Park Race Track anytime after 12 noon. Free pass at Clubhouse entrance, jackets required. Dinner after the races Squires Pub. Please contact Al Caravella for reservations 201-381-6976
ctober 13: M.G.C.S.A. meeting. Woodway Country Club
ovember 18: M.G.C.S.A. annual meeting
ecember 6-9 New Jersey Turfgrass Expo 76, Cherry Hill, N.J.
December 18: M.G.C.S.A. Christmas Party

WELFARE:

Keep us informed. Call Dick Gonyea 914-835-3205, Dan Cancelleri 914-667-3737 or Roger Morhardt 914-279-7181 with any information which you think should be shared.

MGCSA Directory's are still available. Please contact Charles Martineau—273-3755.

Notice: Reprint from March, 1976, Tee To Green

NEWS FROM THE GOLF COMMITTEE

By Al Tretera, and Jim Kaczenski, Golf Chairmen

The Invitational Tournament will be played at the Apawamis Club on September 30th. In order for Class "A" members to participate in the event it will be necessary to attend two monthly meetings prior to the Invitational.

This year the Invitational will be limited to the first 36 teams that reply by sending the team card accompained with a check for payment of the day's activities.

M.G.C.S.A. News: The summer is just about over with the daylight hours just that much shorter and the nights cooler. The last part of August was the warmest weather we have had all summer except for those four 90 degree days in April. The weather can turn cool fast and thats why it is so important to get renovation work, if you are doing it, done in August. Many clubs have to wait until after Labor Day and the traditional Club Championship before any renovation or aerification can start. When Labor Day is late it doesn't give you much time before cool weather hits. September 15 is used as a guide line as to when seeding should be done. Naturally you can seed later but germination is much slower and you also are germinating alot more poa annua at the same time. Your chances of getting a good bent catch are just that much slimmer.

We had a tremendous turnout for our July meeting at Winged Foot Golf Club. Ted Horton had the course in great shape and the golfers turned out in mass to play one of the best courses in America. We had almost 100 golfers and 142 for dinner. Joe Duich gave a great presentation on Poa annua and

Golf winners, A, B and C class, at MGCSA championship tournament

Tee to Green

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Dr. Joe Duich, Penn State University, program speaker on Poa annua.

some of the control methods being researched. He also made some comments about the New York Turf Industry and Extension. We really are far behind our neighboring states in combining the Green Industry into one strong group. It's too bad Cooperative Extension is still not a common word and is not known by the general public. Let's hope in the future we can finally all get together in the total Green Industry.

We had a nice turnout for the MGCSA picnic and softball game. Thanks, go the Bill Caputi for a well done job and also for the Carriers's in cooking and preparing food. Sorry to say the Super's got wiped out in softball. Let's have some practice next time around. Terry Mulligan promises to use his head to better advantage.

A few of the local Superintendents were seen up at RI Turf Field Day. It was a gorgeous day and RI did their usual excellent job in presenting their research. Surprisingly enough, they have had little rain other than the hurricane this past summer.

M.G.C.S.A. Golf Championship.

The second and final round was held at Winged Foot Golf Club which was certainly a great test of golf. Chuck Fatum had a nice final round of 76, along with a 74, to take the championship. Frank Lamphier was second. Bob Phipps took the low net with a 143. Mark Millet won class B. Class C was won by Nick Marino with Dick Hosking taking low net. Jim Kaczenski golf chairman did a great job.

M.G.C.S.A. Life Insurance: The board of directors has voted to discontinue our Life Insurance on individual members. At present we are unable to insure all members. The board decided that we would insure ourselves and that in the future all superintendents, B & C members would be covered by the association for $1000.00. All retired superintendents would be covered by $500.00.

Membership: The following members were approved for membership, Michael Skomsky—Class B, Americo Napolitano—Class C.

Edward (Ted) Horton, host superintendent greeting MGCSA members.

METROPOLITAN GOLF COURSE SUPERINTENDENTS ASSOCIATION RESEARCH FUND REPORT

To date the following clubs individuals and commercial firms have supported the M.G.C.S.A. Research Fund. This money will be used to underwrite Research by the Entomology Department of Cornell University on the Hyperodes Weevil and the Dung Beetle.

Clubs:

The Apawamis Club
The Ardsley Country Club
Blind Brook Club
Bonnie Briar Country Club
Brae Burn Country Club
Burning Tree Country Club
Century Country Club
Country Club of Darien
Elmwood Country Club
Fenway Country Club
Fresh Meadow Country Club
Innis Arden Country Club
Knollwood Country Club
Metropolis Country Club
Old Oaks Country Club
Quaker Ridge Country Club
Ridgeway Country Club
Rockrimmon Country Club
Piping Rock Club
Rockland Country Club
Round Hill Club
St. Andrews Golf Club
Scarsdale Golf Club
Silver Springs Country Club
Shore Haven Golf Club
Sleepy Hollow Country Club
Sterling Farms Club
Sunningdale Country Club
Waccabuc Country Club
Wee Burn Country Club

President Garry Crothers giving Dr. Tashiro of Cornell University $2000 from MGCSA for the hyperodes research program.

Whippoorwill Club
Winged Foot Golf Club
Woodway Country Club
Wykagyl Country Club

Individual Class A, B & C Members:

Garry Crothers
Robert DePencier
Charles Martineau
Robert Alonzi
Allan Tretera
Mike Maffei
Richard Gonyea
Sherwood Moore
Edward Horton
Terry Boles
Dan Verrille
Louis Verrille
Angelo Gagliardo
Joe.Camberato
Michael Dale
Roger Harmonay
Ted Jozwick
Edward Consolati
Robert Capstick
Tony Savone
Benjamin Zukosky
Al Moore
Thomas A. Grywalski
Michael Jacques
Robert Phipps
Thomas F. Grywalski
Gene Grady
Phil Santucci
Roger King
Richard Allen
John Wistrand
Tony Grasso
Bill Somers
John Corsi
Paul Caswell
Vic Cedrone

Metro Milorganite

We would like more clubs to be involved in the research fund.

Research Committee

HYPERODES—A QUESTION OF ONE OR MORE GENERATIONS

By Pat Vittum

One of the questions we have been concerned about in the **Hyperodes** biology study has been how many generations occur in a year. In a recent conversation with a superintendent, I found there was a misunderstanding of terminology. Apparently, many superintendents have been seeing the adults in early spring (as they emerge from overwintering in litter), referring to these adults as the first generation, and observing the eggs and small larvae in the spring as the second generation.

My definition of terminology is as follows: **the eggs that are laid in the spring** by the overwintering adults comprise the **first generation**. The adults of this first generation appear through July and August. If these adults laid eggs (in late summer), these eggs would constitute a second generation. Thus, a generation is the development from **egg to adult.**

Several superintendents have commented that they were sure there were two or more generations, but the weekly and twice-weekly sampling at four sites so far has not revealed multiple generations. No eggs have been observed in field samples since early June. However, we have found areas within a given golf course which are as much as four weeks behind other areas of the same course in development. This difference in time of development certainly adds to the confusion. The micro-environment (primarily soil type) apparently is responsible for the variation, but more studies will be necessary before definite correlations can be made. I will continue to sample through October in an effort to determine whether a partial second generation develops.

Laboratory studies conducted through the summer also did not reveal the development of a second generation. Adult weevils were raised and observed in the laboratory for six to eight weeks and did not lay eggs. One study planned for next summer is the dissection of adult females to determine when viable eggs are developed. Such a study should indicate whether the adults are capable of producing another generation in the summer.

The samples which have been collected and analyzed from

early June through August have provided important information about the biology of the **Hyperodes** weevil. However, many new questions have been raised, so the research continues to be very challenging and interesting.

Carriere's cooking and eating. Gail Wood helping out.

POA ANNUAL—THREE APPROACHES FOR CONTROL
By Ted Horton

Dr. Joseph Duich, Turfgrass professor at the University of Pennsylvania, pulled no punches as he presented his opinions on the New York State Turfgrass situation to the membership of the MGCSA at our golf and educational session hosted by Winged Foot Golf Club. He expressed himself strongly in stating that our Association "is remiss in allowing the New York State Turf situation to go back five steps with the leaving of one man from Cornell." He emphasized "that since 1928 Penn State has sold Turf as an integral part of Agriculture, whereas New York State has not even yet been sold on the existance of turfgrass." Dr. Duich further noted that Penn State budgets $130,000 plus fringe benefits in excess of 40% for the staff salaries for three turfmen, 1 pathologist and 2 extension personnel "whereas New York doesn't even have one Turf Man!" With disgust he noted—"you have been sleeping at the switches."

His point being well made, Dr. Duich then launched into a discussion of Poa annua and its associated problems on golf courses. He stated that "Poa annua presents the most difficult problem that we contend with because it is a plant which has the ability to perpetuate itself under the mowing and watering conditions prevalent in course maintenance today, yet, it annually weakens and often dies during the peak of the golfing season. Unfortunately, there is a great deal of trauma involved in dealing with Poa annua." "We can't kill the plant graciously" and as a result the trauma associated with the control has made us complacent. In particular, this is true as we pass the "crucial 60 days" and approach winter with Poa usually having re-established itself.

Why is Poa annua such a problem? Dr. Duich offered the following comments:

1. the amateur notices Poa annua because of the "white flowers" of spring

2. it has an "indeterminate" flower
3. the plant flowers at mowing heights less than 3/16 inch
4. seed is produced in 1/7 the amount of time of most plants
5. the seed is viable for at least 12 years
6. it is predominantly an annual plant
7. it germinates from seed
8. the seed illustrates "high temperature dormancy." That is, it will not germinate until cool temperatures prevail to insure the survival of the young plant
9. the seed will germinate rapidly under favorable cool periods
10. the young plant will remain dormant until heat stress periods are past
11. the plant is aggressive when temperatures, especially night temperatures, are cool
12. Poa annua will grow vigorously in short day periods
13. Poa annua can outgrow, on a seedling basis, almost all of our other grasses

How then can Poa annua be controlled? "Above all," Dr. Duich noted, "if you are going to attack the plant—know its weaknesses!" Three approaches for control are evident if the life cycle of the plant is examined:

I Pre-emergent control of seed germination
II Inhibition of flower and seedhead production
III Post-emergent control of the plant anytime after germination

Unfortunately, the selected approach has to be undertaken with a minimum of trauma—a feat almost impossible to do.

I Pre-emergent Control of Seed Germination

Dr. Duich noted that pre-emergent control of Poa annua can be accomplished with applications of bensulide (Betasan) before fall germination. Approximately 15 pounds active material per acre per year are required for effective results. The quantity can not be reduced if the desired results are to be obtained. However, the injury risk could be reduced by 50% by skipping a year between applications. The timing of the application is critical and is dependent upon germination of Poa annua. Mid-August is the period suggested by Dr. Duich. He further noted that the bensulide should be watered into the soil immediately because of the wetting agent included in the formulation.

"Pre-emergent control of Poa annua with bensulide is a calculated risk" emphasized Dr. Duich. When questioned about the possibility of chemical injury to the permanent bentgrasses he estimated that there would probably be one chance in ten for thinning and perhaps browning the next year. The type of injury to the permanent grasses was dependent upon the varieties exposed to the chemicals and the different weather conditions experienced. However, Dr. Duich noted, "that often the chemical could be the 'straw to break the camel's back' during a stress situation."

Some of the injury situations experienced by Dr. Duich were then illustrated:

1. bensulide can result in substantial thinning of bentgrass. For example, successive yearly applications of 15 +15 = 0 + 15 pounds resulted in up to 40% thinning of the seeded bents but less for the vegetative bents
2. root growth can also be affected. Notably, two applications of 15 + 15 pounds resulted in a restriction of the initial amount of roots. However, it was sometimes recorded that root growth increased and the total effect on roots remains not understood but appears to differ with varieties and weather conditions.
3. bensulide has been shown to have an effect on rerooting of sod. This was illustrated by a study of 1&½ inches to 4 inches of soil with grass roots growing next to glass. Applications of bensulide restricted root establishment. Dr. Duich commented that the vast majority of the pre-emergent chemicals will restrict root establishment and we should therefore look at the roots of the area to be treated. "Do not apply the chemical to the area where the roots of the desired grasses are poor."

II Inhibition of Flower and Seedhead Production

Flower and seedhead inhibition of Poan annua can be accomplished using the synergistic effect of combining 2 parts of Maleic Hydrazide with 1 part Chlorflurenol. Dr. Duich suggested that the above combination of growth retardants be applied around mid-April at 2.25 pounds active ingredient per acre. Dr. Duich further noted that Mallinckrodt, Inc. offers the above combination of growth retardants registered as Po-San. But he suggested that it is less expensive to combine the materials yourself.

Several limitations of Poa annua control by flower and seedhead inhibition were then discussed:

1. the soil is contaminated with a large number of Poa annua seeds
2. the seed is viable for a long period of time
3. poa annua seed is often a contaminant

III Post-Emergent Control of the Plant after Germination

Two possible approaches for post-emergent control of Poa annua were outlined briefly by Dr. Duich. First of all, granular Endothol appears to favorably retard Poa seedlings but knowing that Poa annua seed is viable 10-12 years and that the application costs are high, Dr. Duich did not feel that this approach was acceptable.

Applications of the combination of Maleic Hydrazide and Chlorflurenol in late September or early October should be considered as a second possible post-emergent approach to the control of Poa annua. Dr. Duich noted that some chlorosis might result but he feels that the club members are less inconvenienced by late fall discoloration than at other times of the year. An important fact to note is that if a frost should occur shortly after application, better kill of Poa annua will result. However, it may also result in more injury to the permanent grasses. An advantage of the fall treatments with the growth retardants is that while it may or may not kill the Poa annua it will produce some floral and seedhead inhibition the following spring.

Result from fall treatments should be seen by mid-January, noted Dr. Duich. However, he suggested that we experiment with the two ingredients as he believes that Maleic Hydrazide is doing most of the kill and inhibition alone. The products have little or no effect on seed and so the treated areas should be seeded immediately after application of the materials. Dr. Duich commented, that in two years of treatment and seeding, fairways could be converted to 70-80% bentgrass. However, the materials cannot be applied to the closely cut bentgrass greens or to the ryegrasses without causing injury that would most certainly be too severe.

In wrapping up his discussion of the control of Poa annua Dr. Duich emphasized the importance of overseeding in conjunction with the chemical programs. Because of its importance he offered the following comments about overseeding:

1. "surface scratching" with the grooved seeder is the best type of overseeding
2. the heavier blade (No. 8) is a must for the seeder
3. to seed, you must cut through the thatch
4. excessive tractor speed can ruin the seeding operation
5. as you seed you are bringing up Poa annua seed but the grooving yields a greater concentration of desired seed in contact with the soil
6. ryegrass is a good intermediate grass to change from Poa annua
7. often, August seeding is difficult because you can lose seedlings in a couple of hot days. As a result, Dr. Duich stressed September or October seeding.
8. the growth regulators if used in the fall will give new seed a better chance by slowing competition
9. reduce fertilizer applications in a reseeding program. Dr. Duich suggested that we not confound the issue in a surface type seeding.

In summary, no matter which program for the control of Poa annua you select "communication with the club membership is a must" stressed Dr. Duich. It has often happened that the Superintendent has lost his job when the chemical program began to work.

Carriere and Mulligan enjoy a few at picnic.

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