



**Meeting Notice MGCSA**

Date: Tuesday, May 25, 1971 Joint meeting  
 Place: NJGCSA-MGCSA  
 Rockland C. C.  
 Host: Ron Boydston  
 Golf: 12 noon on  
 Luncheon Available  
 Cocktails: 6-7  
 Dinner: 7  
 Program: National representatives, Dick Blake, President and Charles Baskin, Director  
 It should be a great meeting don't miss it. Please if at all possible tell Ron Boydston you are coming (914-359-5346) especially dinner!!!

**Coming Events:**

June 8th Rutgers Field Day  
 June 3 Saint Andrews Golf Club—MGCSA Meeting  
 July 15 Winged Foot Golf Club  
 (Superintendents Championship)  
 August 15-19 American Society of Agronomy  
 Meeting (NYC)  
 August 23 MGCSA Equipment and Supplies Field Day  
 Sept. 14 Waccabuc C. C.  
 Oct. 5 Elmwood MGCSA Invitational  
 (tentative)  
 November open

**MGCSA NEWS**

Those that played Brae Burn certainly enjoyed it. It is a good test of golf for anybody. The traps — well groomed and there are some nice plantings around the new elevated tee. Everybody enjoyed the dinner and cocktails in the beautiful clubhouse at Brae Burn. It was a lively head table at dinner and the program was in high gear when the speaker was introduced. Pat Lucas covered the talk which is enclosed in this Tee to Green. The Field Day committee has met several times and we expect to contact all commercial firms by June 15th. If you know of any commercial firm that would be interested in our Field Day, please contact Harry Nichol or Garry Crothers. Frank Bevelacqua tells me that

Telemark Co. has a wonderful measuring device that calculates distances just by looking through a scope and is very accurate.

It has been below average in temperature the last few weeks along with little rainfall until recently. Until we get some warm weather don't expect the grass to perform miracles in those areas which we have all suffered a little winter kill or dessication. It's a good time for an informative letter to the general membership as to what has happened and when you expect recovery. Everybody tends to think the growing season is earlier. I always judge each Spring according to the outbreak of new leaves on the trees. When the trees are full foliated than the grass is also growing too, but not much before unless you are pushing it with a lot of soluble fertilizer. In comparing with last year the maples were at full foliage on May 9th so we are a little later this year. Just note when the forsythia comes out, tulips, etc., but be sure it's your golf course as certainly there can be a great difference between say Rye and Armonk or up in Fred's Mt. Kisco area; and certainly there could be two weeks difference between Pelham and Brewster.

It was a fun night at The Apawamis "Barn Dance" for the open house and square dance. Everybody let their hair down and a great time was had by all as the evening ended at 2:30 A.M. We even had straw hay to decorate the shop along with a few bags of Milorganite.

I guess we were all fooled this Spring when we discovered our many breaks in the old irrigation system. Some of the breaks were hard to figure out. Steel pipe actually shattering. Mother Nature always has a few quirks to keep us guessing and certainly rules the roost.

The Westchester County Agricultural News was an excellent issue. I hope you had an opportunity to read it. We have included one description in this issue of the cankerworm which does a great deal of defoliation also.

We hope Andy's wife is coming along fine from her recent accident.

**Jobs Wanted**

Golf Course Superintendent or Assistant  
 Contact: Mr. Thomas Gialanella  
 120 Riverbrook Avenue  
 Lincroft, N. J. 07738  
 Resume can be obtained from Ted Horton or Garry Crothers



**Editorial Staff**

Garry N. Crothers	<i>Editor in Chief</i>
Edward Horton	<i>Editorial Staff</i>
Pat Lucas	<i>Editorial Staff</i>
Ron Boydston	<i>Advertising Manager</i>

**OFFICERS**

<i>President,</i>	Everett Wood, Scarsdale G. C. Office 914-723-2840, Home 914-472-0174
<i>Vice President,</i>	Harry H. Nichol, Elmwood C.C. Office 914-592-6608, Home 914-354-4582
<i>Secretary,</i>	Edward C. Horton, Winged Foot G. C. Office 914-698-2827, Home 914-835-1181
<i>Treasurer,</i>	Garry N. Crothers, The Apawamis Club Office 914-967-2100, Home 914-666-7126

**BOARD OF DIRECTORS**

Ronald Boydston, Rockland C. C.	Office 914-359-5346 Home 914-359-2910
Dominick DiMarzo, Bonnie Briar C. C.	Office 914-834-3042 Home 914-273-8955
Charles Martineau, Whippoorwill Club	Office 914-273-3755 Home 914-428-3826
Anthony Savone, Innis Arden C. C.	Office 203-637-3210 Home 203-637-4475
Past President John Madden, Engineers C. C.	Office 516-621-5350

*Not copyrighted. If there is good here, we want to share it with all chapters – unless author states otherwise.*

**RESEARCH REVIEW**

by Wayne C. Morgan

“Some brief, summaries of results obtained from recent research conducted at Michigan State University.”

Drs. James Beard and Paul Reiche head a six-man research team at Michigan State University at East Lansing. A recent publication of their results was so full of valuable information, it seemed of significant value that a summary of these projects be extended to turfgrass people in other areas also.

Found that direct low temperature injury can be minimized culturally through (a) proper surface and subsurface drainage; (b) a lower, judicious nitrogen fertility level; (c) an N-K nutritional balance of 3 to 1; and (d) low soil arsenic levels.

Developed improved methods of roadside establishment in Michigan involving proper (a) seed mixture (a minimum of 20% each of Kentucky bluegrass, red fescue and ryegrass); (b) seeding rate (80# per acre); (c) seedbed fertilization (80# each of N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O per acre); and (d) mulching (two tons of straw plus 100 gal. of asphalt per acre or Soil Retention Mat).

Demonstrated hydroseeding to be quite inferior to shallow soil incorporation and rolling in achieving rapid, uniform turfgrass establishment under droughty Michigan conditions.

Showed that sod rooting was most rapid when (a) placed on moist rather than dry soil; (b) maintained at a relatively low nitrogen level prior to harvest; and (c) harvested at 0.4 to 0.6 inch depth.

Found no difference in the rooting ability of sod grown on organic or mineral soil.

Found high levels of nitrogen fertilization to increase the incidence of fairyring.

Demonstrated that *Fusarium* blight disease development could be minimized by avoiding turfgrass moisture stress through proper irrigation practices.

Showed seed germination of *Poa annua* to be highest under alternating day/night temperature in the 55° to 75° range and to cease at soil temperature of 80° or higher.

Found ball roll distance was increased somewhat by (a) spiking; (b) coring; or (c) light topdressing while mowing at 2 or 3-day intervals seriously impaired the distance of ball roll.

Shown that thatch decomposition is favored by a pH between 6.0 and 7.0 and can be stimulated by certain enzymes and enzyme pressures.

Shown that plant parts or turfgrass species having a higher lignin content are more prone to thatching.

Showed that as little as a 4 mph wind can reduce the maximum temperatures of a bentgrass turf by 10° to 15° F.

Found the timing of syringing during heat stress can be critical in the degree of turfgrass heating that occurs. Syringing 1 to 2 hours before the 2:00 P.M. maximum is preferred.

Found that the application of more than 1 pound of nitrogen per 1,000 square feet in any one application results in the exhaustion of the carbohydrate reserve.

Shown placement of phosphorus on the soil surface caused a suppression of turfgrass seed germination compared to soil incorporation.



Apawamis's new Maintenance Building (Shop area)

# Cankerworms

The spring and fall cankerworms are common native pests of deciduous forest, shade, and orchard trees. They periodically cause serious defoliation in the northeast and range over most of the United States and southern Canada.

There is close resemblance between the two species in all stages. The female moths are wingless and the caterpillars are known as inchworms, measuring worms or loopers. There is only one generation a year.

## Damage

The caterpillars of both species appear on trees in early spring. They destroy the young leaves and buds of a wide range of common deciduous trees, but prefer elm and apple. Cankerworms are also abundant on oak in southeastern New York and Long Island. By the time the larvae finish feeding only the major veins and midribs of the older leaves are left. Trees may be completely defoliated. If this happens two or three years in succession, trees may die or be seriously weakened. In the case of elms in areas where Dutch elm disease is present, this is an important leaf-feeding pest to control.

## Spring Cankerworm

The caterpillar has a dirty-white head, mottled with brown, instead of a green to black head as in the fall cankerworm. It also has five pairs of legs instead of six pairs. When full grown the caterpillars are three-quarters to one inch in length.

The moths appear in April and May and lay small irregular clusters of eggs on the bark, about fifty or more to a cluster. Hatching and feeding is about the same as the fall cankerworm, but when the caterpillars enter the soil to pupate, they only make an earthen cell.

## Fall Cankerworm

The full grown caterpillar is about an inch long and varies in color from green to brown or black, with pale lines running the length of the body and possibly a dark stripe on the back. Six pairs of legs are present, though one pair is quite small.

The moths emerge from the soil in November and December. The greyish-brown eggs are laid on the bark of twigs and limbs in close ranked flat masses of one hundred or more. They hatch in April and early May as the buds open and the caterpillars feed for four or five weeks. When fully grown they enter the soil where they make tough silken cocoons near the surface. They pupate in early June, but moths do not emerge to lay eggs until November.



LARVA

## SPRING CANKERWORM



LARVA

## FALL CANKERWORM

## Control

These pests are ordinarily kept at low population levels by natural factors. When control is warranted, insecticides such as Sevin effectively kill the larvae and protect the trees from defoliation. The control for both species by insecticides is the same and comparatively simple if the material is applied in late April or early May.

Sevin may be used at the rate of two pounds of 50 per cent wettable powder per 100 gallons of water or 6 tablespoons per three gallons of water.



Does this winter injury look familiar?

## APRIL MEETING

The speaker for the April 22, 1971 meeting of M.G.C.S.A. was Mr. Norman Barlett of the Smith Irrigation Company of Milford, Conn. Mr. Barlett's topic was "The Proper Installation of an Automatic Irrigation System."

For the most part Mr. Bartlett's speech covered the pre-installation planning of a system. His intention as I saw it, was to make the superintendent more aware of what goes into the planning and development of a system design. There are many systems available and Mr. Barlett tried to point out some of the many options and variations.

In the planning of a system, the Superintendent should find what is available to him on the market. This would include heads, valves, controllers, pipes, pumps, and designs which could be either single or double row systems. Check your present system against the total areas that you would like to have watered. This can be helpful in the planning of a new system.

Get more information about automatic irrigation systems. This can be obtained from Salesmen, Universities, Conferences, Distributors, and Installers. Information can be best obtained from the golf course superintendents who have the system.

The Superintendent should be involved in the design of the system. He knows the system course and the soil conditions. He should tell the designer what he wants and needs to water the course.

Hire a competent designer. You should expect the following:

1. Plan
2. on site design
3. complete measurements of course
4. locations of all heads, pipe, wires, drain and sectional valves, pumping plant, and controllers

Change any of the specs before construction starts. Know the length of construction time. Know what kind of warranty is involved. Have bids made up and get a contract. (club lawyer) Also a club may require bonding of the installer.

With the trouble a lot of clubs have had with automatic systems it would be wise for the superintendent to look into the matter more extensively before choosing a system.

Pat Lucas  
Staff Writer



MELVIN E. ...  
GARDEN CITY ... CLUB  
315 STEWART AVE  
GARDEN CITY, NY 11530

First Class

GOING AUTOMATIC?  
CHECK WITH

# DeMARCO

TURF IRRIGATION CONTRACTORS INC.

THE AUTOMATIC PEOPLE WITH EXPERIENCE

HAMMONTON, N.J.

(609) 561-6397  
(609) 561-0464

## THE POWERHOUSE

ROUTE 6 & DINGLE RIDGE ROAD  
BREWSTER, NEW YORK 10509  
(914) 279-7181

TORO

HAHN WEST POINT

RYAN

COMPLETE LINE OF TURF EQUIPMENT

NEW OFFICE & SERVICE FACILITIES CONVENIENTLY LOCATED



JUST OFF I-84 & I-684