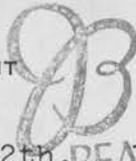


# NORTHERN MICHIGAN TURF MANAGERS ASSOCIATION

C. E. "TUCK" TATE, PRESIDENT  
MICHAEL T. GARVALE, VICE-PRESIDENT



THOS. J. REED, SECRETARY-TREAS.  
3733 APOLLO DRIVE  
TRAVERSE CITY, MI. 49684

WEDNESDAY, SEPTEMBER 12th, 1984  
LAKEWOOD SHORES COUNTRY CLUB, OSCODA

PHONE: 616/943-8433

Our next meeting will be at the above location on the date indicated. This is a fine 18 hole golf course designed and built in 1970 by the famous Michigan architect Bruce Matthews. It is a fine layout located on the east side of the state and owned by Westinghouse Credit Corporation.

For those of you that do not know how to get there, Oscoda is located on U.S. 23. Stay on U.S. 23 coming from the south, go straight thru Oscoda, north four miles to Gaston Lane. On this intersection there is Pete's Party Store plus a Lakewood Shores Golf sign. Here turn west to the first stop sign, then turn right or north about four miles and you will pass the club.

For those of you desiring to play golf, Dave Little, the host super and Dick McQuiag, general manager, invites you to a real golf challenge. Starting times at this time of the year are not necessary, however the entire package will cost you \$20.00 per person. This will represent \$7.00 for cart, \$3.00 for golf and \$10.00 for a fine prime rib dinner. Prime ribs are a speciality at this Westinghouse resort and very famous for it.

For those coming for the meeting and dinner, we will start dinner promptly at 6:00 P.M., so that everyone can get an early start back. For you who wish to play golf, please pace your program to be available at 6:00 P. M.

Our speaker for the evening will be Mr. Robert Moore, President of Aquatrols Corporation of America. Bob has some very special information on work done recently at several colleges and this is very important to being on top of the latest info .

As usual, the postcard is enclosed and we do appreciate the return immediately. Don't procrastinate, get off your duffand please mail. Remember, we are giving prizes for returning your card and you don't have to be present to win.

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The October 2nd meeting will be held at The Grand Traverse Resort. We will play all 18 holes of the new Jack Nicklaus "Bear" course. This day of play will be limited to members ONLY. Reason, the starting times available are not sufficient to permit guests. Guests will be turned away. We hope that we will have your cooperation and that everyone understands the situation. Thanks.

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CORRECTION: Only the front 9 holes of "THE BEAR" course will be played. After playing on Aug. 27th, Jack decided on a few changes.

## FIELD RESEARCH AT THE HANCOCK CENTER

By DR. BRUCE BRANHAM

The summer of 1984 has been my first full year for initiating field research at MSU. I would like to take this opportunity to discuss some of the field research that I've begun.

First, a new graduate student, Mr. Roch Gaussoin, has started his Ph.D. studies under my direction with a grant from the Michigan Turfgrass Foundation. Roch has started a very intensive field project that will be of interest to all people in the golf course industry. The first field study established was designed to look at the competition between annual bluegrass and creeping bentgrass as affected by five management variables. These five factors consist of three levels of irrigation, two levels of fertility, three plant growth regulator treatments, clippings removed versus clippings returned, and overseeding or no overseeding with bentgrass. Thus, the intent of the study is to establish the combinations of management practices which favor either annual bluegrass or creeping bentgrass. Ideally, the experiment will allow us to develop a cultural adaptivity spectrum permitting a superintendent to employ one set of cultural practices to favor creeping bentgrass and another set to favor annual bluegrass. In addition a companion study was started to examine the effects of compaction and core cultivation on the competition between the two species. Compaction is applied with a water filled roller to half of the treatments and then different frequencies of core cultivation are applied to the compacted and uncompacted plots. By combining the two studies, seven factors and their interactions will be examined for their effects on the competitive ability of annual bluegrass. I think this study will go a long way towards defining the conditions needed to encourage either annual bluegrass or creeping bentgrass.

The main emphasis of my field research this summer focused on herbicides and plant growth regulators. Two plant growth regulators receiving considerable attention from the golf course industry are Embark and EI-500 (Cutless). These two PGR's may have opposite uses, Embark can be used effectively to control annual bluegrass seedheads from developing. I would recommend rates of between 4-8 ounces of product per acre. Embark seems to control seedheads for about one month.

In order to control the flush of seedheads that occur around the 3rd-4th weeks in May, Embark needs to be applied in early May (May 1-5). For

those of you who have access to good temperature data, we have seen the best results with an application when 50 growing degree days have accumulated. Annual bluegrass will produce seedheads throughout the summer, and one application of Embark at the proper time will control the majority but will not control seedheads produced from late June on. Embark may enhance summer survivability of the poa because Embark keeps the plant in the vegetative stage and prevents the plant from using its reserves for seedhead production. While this hypothesis sounds plausible, we don't have enough data yet to prove it.

Cutless (EI-500) may have the opposite effect in that it seems to selectively remove annual bluegrass from creeping bentgrass. We have several studies out to try and determine what rates and application dates give the best results. Cutless does give a selective phytotoxic response to annual bluegrass which is exhibited as a yellowed, chlorotic turf. Thus, anyone who has more than 50% annual bluegrass fairways had better be ready to accept predominantly yellow fairways when using this material. The possibility of using lower rates of Cutless and taking more time to make the transition to creeping bentgrass needs to be investigated. Cutless was available in Detroit this year under an experimental use permit and will be available under the same program in 1985. Cutless will probably be marketed in 1986.

These are just a portion of the studies being conducted this year at the Hancock Research Center. I hope to see you at the 1984 Field Day and Trade Show on September 6, when all of our research will be on display.





# GCSAA NEWS

1617 ST. ANDREWS DRIVE      LAWRENCE, KANSAS 66044  
Billy J. Shelton, Media Relations Manager      913-841-2240

FOR IMMEDIATE RELEASE:

August 8, 1984

The age of the computer has come to GCSAA! At the touch of a button, the Association can learn almost anything it is necessary to know about a member.

What advantages are available through computer use? Ask James G. Prusa, CGCS, GCSAA Associate Executive Director. "I met a couple of members on one of my trips. After returning to the office, I wanted to drop them a note. I didn't have their addresses so I went to the GCSAA computer. By pressing a few keys on the computer keyboard, I was able to find their addresses, telephone numbers...all kinds of information -- just like that!"

Another example comes from Billy J. Shelton, GCSAA Media Relations Manager. "The LPGA called requesting the names of the professional superintendents at three courses where the LPGA was conducting tournaments. I went to the computer, and in less than five minutes had the names of the superintendents for those courses."

In both examples, it might have taken hours -- possibly days -- to find the information without the computer.

The computer will provide more information than phone numbers and names. By knowing only an individual's name, information such as phone numbers, addresses, club name, chapter affiliation, education, certification, awards and honors, committee assignments and personal information can be found. Other information is also stored in the computer that can be retrieved at the touch of a button.

(more)

Also, by knowing only the club name, the superintendent's name can be found through the computer; and vice versa.

GCSAA emphasized personal or sensitive information about members is treated as confidential. Security of computerized records is maintained by pass codes to which only key GCSAA officials have access to further insure confidentiality.

The following depicts the information shown on the computer screen:

```
-----  
MEMBERSHIP MASTER FILE INQUIRY  
-----  
CODE...          MEMBER ID#...      PHONE...  
NAME...  
ADDR1...        FOREIGN...        COUNTRY...  
ADDR2...        AIRMAIL...  
ADDR3...  
CITY...         STATE...  ZIP...          MAIL TO...  
TYPE MEMBER... UNKNOWN...      VOT'G STATUS...  
TITLF...  
-----  
SELFCATOR MENU  
-----  
1 = STATISTICS  
2 = DEMOGRAPHICS  
3 = GOLF COURSE AFFILIATION  
4 = CHAPTER AFFILIATION  
5 = EDUCATION/CERTIFICATION  
6 = CONTINUING EDUCATION  
7 = COMMITTEE PARTICIPATION  
8 = HONORS/AWARDS  
9 = COMPLIMENTARY SUBSCRIPTIONS  
  
ENTER SELECTION (CONTROL II FOR NEXT RECORD, CONTROL IV TO END)  
-----
```

For further information on GCSAA's computer, call toll free, 1-800-GSA-SIPT.

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Purdue Midwest Field Day will be held on Tuesday, September 25th, 1984 at Purdue Agronomy Farm, on Highway 52 NW, West Lafayette, In.

For further details, Please call Dr. W.H. Daniel 313/494-4785  
Dr. R. P. Freeborg 4784  
Jo Horn, Secretary 8039

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Anyone wishing to stay 7 days or longer at Washington, D.C. for the G.C.S.A.A. Conference in Feb., there are one bedroom condominiums which are available at \$65 per night and 2 bedroom condos for \$85 per night. Contact Sylvia Nomicos of Condominium Rentals, Ltd. at 800/638-4888 for information. Literature will be mailed to you. This is a nice alternative to hotel rooms.

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## EVERYTHING YOU DID NOT WANT TO KNOW ABOUT MOLES

I will tell you about those pesky little buggers. They have a name; the common mole and they belong to the Mammalian classification; order of Insectivora and family Tolpidae and their general species of *T. Micrura*. But, what I REALLY call them would make Abdulla, the camel driver blush!!!

The mole is not very big; about 5¼ inches long and has a cylindrical body with a club-shaped tail. The female is slightly smaller and they have a long snout which is rather pointed. Moles have small eyes that are hidden in the fur; an internal ear that is no more than a ridge. The head and snout have long bristles.

The fur is velvet and very soft to the touch. Usually, it is dark gray to almost black; although, moles have been found that were grey-yellow, orange, cream, or white.

All four limbs are short and enclosed within the skin of the body. The limbs are well forward; the front paws are broad with 5 toes and an extra crescent bone, giving even greater breadth. Each toe has a strong claw; the hind feet are small by comparison but not as weak as they are usually described.

Moles are solitary and are seldom seen together except at maturing times when females will build a nest from 18 inches to 3 feet below the surface and will stack it with dead grass and leaves. They usually mate during late March and early April and the litter is born in 5 to 6 weeks. They are blind, naked, and pink in color and start getting their fur in 2 to 3 weeks. There are usually 3 to 4 moles in a litter but there can be as many as 7 and as few as 2. Young moles leave the nest at 5 to 6 weeks and go out on their own. They become sexually mature at 10 to 11 months old.

The mole is a restless creature and will alternately rest, feed and hunt every 3½ to 4 hours. It is quite common for them to be tunneling right after sun-up, right after noon and at sunset.

Their natural habitat is the forest or woodland areas but they will seek any place that may offer food. They live almost wholly underground, seldom coming to the surface and when they do, it is only for short spells and they are looking for a new run.

Their chief senses are smell and hearing and they have an extraordinary sense of touch at a distance. They can pick up the slightest of vibrations.

Surface runs are primarily for feeding and hunting and they can travel at a rate of 7 to 8 inches a minute. When in an area they have as many as 3 layers of tunnels; surface, as mentioned; another at 3 to 6 inches below the surface (also for feeding); and then a set 18 to 20 inches below for resting. There is no pattern for these tunnels. They seek the path of least resistance or if the soil is distasteful, they will go in another direction. A mole can cover anywhere from ½ to 4 acres with intersecting tunnels. When not digging, he can move rapidly through these tunnels, using a swimlike method. It can move equally well either backwards or forwards. When a large mound is seen in an area of a surface run, this is usually a nesting or resting area and may be a vertical tunnel to as much as 3 feet in depth.

The mole eats insects, wireworms, cutworms, grubs, etc., however, its principle food is earthworms. It cannot survive more than a few hours without feeding and when earthworms are plentiful it may store them. It bites off the tip of the worm's head. With its four teeth it twists the worm into a knot and pushes it into a cavity in the soil. These stores can sometimes include hundreds, even thousands of earthworms. Should the mole not need them, the worms in time regrow their heads and burrow away. When eating a worm, the mole holds it

down with its forepaws, bracing the body with its hind feet and chews it from the front end backwards. A single mole will eat 40 to 80 lbs. of food per year. It does not need to drink when feeding on worms, as they are 85% water.

The moles have no natural enemies except possibly man and then only when he leaves a wooded area and trespasses into lawns, parks, and golf courses. There is a long list of remedies to rid moles but most of them are old folklore. But as a personal note, I think at one time or another, I have tried them all with various degrees of results. The examples are:

**Drowning:** Not practical because of the length and depth of runs: you can have water in a lot of places where you don't need it.

**Carbon Monoxide & Other Gases:** again, due to runs, gas can be all over and create some problems, especially on Ladies' Day.

**Strychnine Treated Worms:** somewhat effective but you do not know if you really got him or if he moved.

**Poison Peanuts:** moles will avoid these because they recognize that the run has been disturbed and also they do not normally eat peanuts.

**Trapping:** somewhat effective, but care must be used in setting trap; mole can recognize run has been disturbed.

**Physically Catching:** being at the run when mole is working; kicking him out of the run, then killing. After getting a mole out of the run, don't stand there and admire him; just that quick, he can be back into the ground and gone. I feel this is the best way.

**Distractors:** windmills or anything that will cause vibrations; the moles extreme sense of touch will sense the vibrations and move to another area.

**Chemical Distraction:** Spraying barrier strips with an insecticide using 1½ rate and 6 to 10 feet wide; the mole doesn't like the taste and will move on and will not cross it if it is wide enough.

John Stephensen, CGCS

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## Verticutting: Here To Stay

Thirteen years ago when I entered the golf course profession, verticutting was sparingly done. Usually during the first mowing in the spring, it was used to help stand up the grass plant which had been lying down all winter. I think that in the last few years, with pressure being put on the superintendent for faster, tournament conditioned greens, verticutting has evolved as a widely used practice for better grooming.

By setting your vertical cutting units so they are just barely touching the surface of the turf they will stand up any of the grass blades which have been lying down not being cut by your mower. The result is a smooth even surface. Followed by regular mowing it will hardly be noticed what you've actually done. If your club has two triplex greens mowers this can easily be accomplished without inconvenience to the golfers.

We all know that thatch has ruined many a good golf green, but by verticutting on a regular schedule of once a week, thatch can be reduced, allowing better penetration of water, fertilizer, and chemicals.

Over the years many ideas have come and gone, but it's safe to say, verticutting is here to stay.

(Credit - "Our Collaborator" James Kurposka)

## Turf Cultivation and Compaction Research at M.S.U.

By JAMES A. MURPHY  
Department of Crop & Soil Sciences

Compacted soil is a major problem on many high use recreational turfs. A soil's physical properties change as it is compacted. Air and water movement through the soil are reduced as a soil becomes more dense. Slower water movement results in slower drainage and increases the chance for water ponding and runoff. Therefore, water use efficiency can be reduced under compacted soil conditions. The physical resistance to root growth increases as soil density increases. In general, the overall quality of the turf is lower in a compacted soil. One practice used to combat compaction is turf cultivation.

Turf cultivation can take on many forms, such as coring, spiking, slicing, and subaerification. Each type of cultivation affects the turf and soil below in different ways. Therefore, each type must be evaluated for its effectiveness in achieving the desired results, such as, relief of compaction, improved rooting, thatch control, or increased water infiltration.

Several types of cultivation are currently being investigated to determine their overall effectiveness in modifying soil physical properties. Cultivation types of particular interest are hollow tine coring (drum and vertically operating units), shattercore aerification, and the Aerway aerifier.

Much interest has been shown in shattercore aerification. Shattercoring is aerifying with solid tines. These solid tines replace the hollow tines on the conventional vertically operating aerifying units. Proponents claim that fracturing of the soil occurs as a solid tine impacts and penetrates the soil. Based on preliminary observations we feel that soil moisture content and bulk density play important roles in the ability of shattercoring to adequately modify a soil's physical properties. A field study has been initiated on Penneagle bentgrass putting green to determine the effectiveness of shattercoring and hollow tine coring at different moisture contents on a soil with varying bulk densities.

Other experiments include determining the potential hazard of dessication of a turf after aerification. Moisture content of the soil will be monitored after aerifying to see how rapidly water loss occurs. Shattercoring and hollow tine aerification will be the methods of cultivation evaluated. Also, cultivation treatments on athletic fields will be evaluated.

## Loft's Turf Graduate Students Combine To Aid The Hancock Center

Loft's Seed Inc. and the crew of the Hancock Turfgrass Research Center recently undertook a project to help pay for the operation of the Hancock Center. The project, organized by research and extension technician Shawn McBurney, consisted of seeding a 6 acre site on the MSU campus. Loft's donated 700 pounds of their Palmer and Prelude perennial ryegrasses to the project. The Hancock crew consisted of technicians McBurney, Mark Collins and Carrie Haynes and graduate students Roch Gaussoin, Lee Berndt, Jim Murphy and Mike McElroy. The project netted \$2,500 towards the operation of the Hancock Center. Our sincere thanks to Loft's and the Hancock Center crew for their contribution to turf research.

Water infiltration rates are often drastically reduced on football and soccer fields after heavy use in the fall. The Aerway, Dedoes drum type, and Ryan's open spoon aerifiers will be evaluated on their ability to increase water infiltration rates. Earlier research has indicated the possibility of a cultivation pan forming as a result of coring. A field study designed to induce a pan below the zone of cultivation should help confirm or disprove this idea. After many coring treatments on a Kentucky bluegrass turf, the soil will be examined at one inch intervals to a depth of 6 inches to determine the influence of coring on soil properties.

Laboratory studies will examine the influence of hollow and solid tine coring on prepared soil cores. Areas of interest include tine speed during penetration of the soil, initial soil bulk density and moisture content, and the tip and overall shape (design) of the solid tine.



The Constitution- By-Laws states that the annual meeting of this Association will be held in September, at which time election of Board of Directors will take place. The slate of candidates proposed by the nominating committee shall appear in the notice of the annual meeting. Additions to the nominees recommended by the nominating committee shall be accepted if proffered from the floor at the time of the election. The election shall proceed by secret ballot and be decided by a simple majority. Only Class "A" and "B" members are permitted to vote. Unless 1984 dues have been paid, no member shall be permitted to vote at this election. These are the ground rules and there are no exceptions so please be sure that your 1984 dues are paid.

Your nominating committee composed of Dave Longfield, Chairman, with Harold Birtles, Joe Burda, John LaBoskey and Leonard Powell are submitting the following names for your choice to a three year term on the Board:

Tom Courtemanche, Green Hills Golf Club  
Bob McElheny, Antrim Dells Golf Club  
Jim Olli, Hidden Valley  
Bill Bost, Grayling Country Club  
Gary Pulsipher, Cadillac Country Club  
Bob Steinhurst, Jr., West Branch Country Club  
Jon Scott, Grand Traverse Resort

One person will be elected from the Class "G" membership to serve a two year term on the Board. The committee has submitted the following names for this position:

Fred Miller  
Tom Reed

Nothing in the By Laws prevents a person now serving on the Board from being reelected unless he has already served two consecutive terms. None of the above names will fit into this category. The only person now whose term of office is expiring and cannot be reelected to the Board is Tuck Tate, who must step down having served thirteen years on the Board.

Officers to run this Association will be elected at the October meeting at Grand Traverse Resort. At that time, the Board will elect the new officers whose term will run for the next fiscal year or until replaced.

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The date of October 27th has been set as big night for the gals or the big social party. Details for the location, price, plus will be forthcoming in our next newsletter. At that time we are promised that there will be pleasant surprises for everyone. So gals, starting now, please put your act into gear and be sure that you will be with us.

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Other important dates in September which should be on your calendar:

Sept. 6th, Field Day, Equipment Show and Auction, M.S.U. Hancock Center  
Further details will be forthcoming to all members of M.T.F.

18th, M.S.U. Seminar, Traverse City Golf & Country Club, registration at 8:45 A.M., full morning program in Clubhouse plus an afternoon of calibration of spreaders, sprayers, both dry and granular, power equipment and hand operated showing all the fine points and letting you decide which is the best method and type of equipment for you and your budget.

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# GOLF CARTS CALLED AS MUCH A HAZARD AS CARS

TALLAHASSEE—Mildred Meister, pausing for a drink of water before the eighth tee at a Hollywood-area golf club, was stepping out of her E-Z-GO cart in August 1978 when a runaway cart pinned her against a rest-area building.

She wants to collect damages from the golf club, but an appellate court said she can't, because a golf club is not responsible for its golf carts as long as they are in good working condition.

But Mrs. Meister's attorney, Mark Hicks, argued before the Florida Supreme Court Thursday that carts like the one that injured Mrs. Meister are as dangerous as automobiles.

Just as much as the driver of the vehicle, Emerald Hills Country Club should be responsible for paying for the multiple, painful fractures to her leg, Hicks argued.

If the high court accepts Hicks' argument, country clubs, airports and any other owners of similar carts would be responsible for injuries caused by the carts, even if there is no way they could have prevented them.

The "dangerous instrumentality" doctrine, a rule that dates to the era of the Model T, covers cars and several other motor vehicles, making the owners liable for their use.

The Sunshine State, with its ever-present golf courses, should include golf carts in that rule, Hicks contended. In fact, every motorized vehicle, including lawn mowers and possibly electric wheelchairs, can be dangerous instruments, he said.

"A golf cart is a car," the attorney said. "Some [cars] are

motorized with gas engines, some have electric engines. I think we're getting hung up on the definition of a golf cart."

But Joseph Kashi, attorney representing Emerald Hills, argued that golf carts are not motor vehicles and are not dangerous instruments. They are not as dangerous as cars, nor as widely found on public thoroughfares, the attorney argued.

"Golf carts on golf courses are not used on a highway," he said. "We feel the fact that a vehicle . . . is principally designed for use off the public highways takes away from [its] menacing nature."

The justices seemed fascinated by this argument that depends largely on comparing the varying safety of vehicles, from mopeds to tractors.

Justice Parker McDonald asked with a smile how much a ruling that carts are dangerous might affect cart fees.

Much of the questioning sought the shades of difference between injuries from a car and those from a cart.

The suit against the driver of the cart, who was a friend of Mrs. Meister's, is pending until the golf cart issue is settled. Mrs. Meister named the country club in the same suit.

Last fall, the 4th District Court of Appeal in West Palm Beach ruled that golf carts are motor vehicles but declined to consider them dangerous instruments.

The state Supreme Court is expected to issue a decision on the status of golf carts in several months.

Credit: Fort Lauderdale News

DO YOU JUST BELONG? THINK IT OVER!  
by Marsha Harmin

Are you an active member  
The kind who would be missed?  
Or are you just contented that  
Your name is on the list?  
Do you attend meetings  
And mingle with the flock?  
Or do you stay away  
And criticize and knock?  
Do you take an active part  
To help the work along,  
Or are you satisfied to be  
The kind who just belong.  
Do you ever work on committees  
To see there is no trick,  
Or leave the work to just a few,  
And talk about the clique  
So come to the meetings often  
And help with hand and heart  
Don't be just a member  
But take an active part  
Think it over, members,  
You know right and wrong;  
Are you an active member,  
Or do you...just belong?



"If the day looks gloomy  
And the chances kinder slim,  
If the situation's puzzlin'  
An' the prospects are grim,  
And problems keep pressin'  
Till Hope is nearly gone —  
Jus' bristle up an' grit your teeth  
And keep on Keepin' On!"

Courtesy is the lubricant which keeps the machinery of human intercourse running smoothly; right or wrong, if you are courteous you will get consideration.

The Blonde Down the Hall says one good idea put to use is worth a hundred buzzing around in the back of your head.

The Old Bach' says the fellow looking for a soft job is sure to find hard sledding.

Doing the best you can with the little opportunities that come along will get you further than idly wishing for the big chance that may never arrive.

It is better to plan  
less and do more.  
WILLIAM ELLERY CHANNING