

Sc

August 1974



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# A Patch of Green

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

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## The Year of the "Fairy Ring"

Numerous reports of "fairy-ring" on Detroit area golf courses have been heard of this summer. "Fairy-ring" is a fungus that we know little about. It is a spectacular disease because of its large green circles and often times the brown circles when the grass finally dies.

Fairy rings have been known for centuries. The Bible even mentions them. The organisms causing fairy rings are fungi belonging to the group known as Basidiomycetes.

There are three basic types of fairy ring found in turf - most of which will form specialized fruiting structure, mushrooms and puffballs. They all produce rings of different types.

*The first type* - This disease usually only stimulates the grass and causes a dark green ring - provided that the soil remains moist.

*The second type* - the grass is killed or badly damaged - the outer ring is usually dark green.

*The third type* - there is no apparent ring except for a few mushrooms or puffballs.

Several researchers feel that death to turf is caused by (HCN) gas, hydrogen cyanide.

At present there are no known controls for fairy ring. Aerification and soil sterilization have been tried with little success.

Several Superintendents have observed an increase in fairy ring since systemic fungicides were introduced. There is no apparent reason or strong theory to support this observation. However, quite recently a German scientist reporting from Bavendorf, Germany has shown that certain systemic fungicides are toxic to earthworms (that are so vital to good aeration and decomposition of organic matter). Of the three compounds used on turf, benomyl produced the greatest reduction in the earthworm population.

At present, no known work is being done in the U.S. to substantiate the findings in Germany. As a matter of fact, many Superintendents feel they have reduced the fairy ring problem on their courses since they began using systemics.

There may be some relationship between the excessive amounts of moisture last year and the increase of fairy ring this year.

I guess we just don't know why there are so many cases of fairy ring.

# June Meeting

A packed house came to hear Dr. James Beard of M.S.U. at our June 11 meeting at Orchard Lake C.C.

Host Superintendent, Jim Timmerman, had the course in perfect condition as always. Over 50 members played golf.

Dr. Beard mentioned that stripe smut in Toronto C-15 bent grass was a serious problem this year especially when coupled with an invasion by Nematodes. Symptoms are thinning and a general fading out of turf.



June meeting speaker, Dr. James Beard of Michigan State University.

He reported that attendance at the winter Turfgrass Conference has grown steadily since 1960 when 50 people were in attendance to 678 last winter.



President Gerald Gill, on right, presenting Tom Talkington, president of the Michigan Section PGA, with a check for \$500 for the National Golf Day Program.

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## Thatch Wanted

I am currently studying under Dr. James Beard at MSU toward a master's degree. As a research problem, I am planning to do some extensive work with that old nemesis — thatch. When Dr. Beard and I were at the June MBCGCSA meeting, we mentioned to the members that we were in need of thatched areas of various depths on both bentgrass and bluegrass turfs, and, while the response was good, we still need some additional areas.

**NEEDED:** thatch and/or mat (thatch mixed with soil from topdressing) areas of a depth anywhere from one inch on up on bluegrass and/or bentgrass turf.

**SIZE:** any size area that you can afford to sacrifice.

**USE:** some 2½ inch samples to be removed for analysis and several 6' x 10' areas for use in wear tolerance studies utilizing a wear simulator.

**Contact:** Dave Duncan

317 Agriculture Hall

MSU

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Phone: (517) 353-4417

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## Turf Field Day

*September 30 Field Day:* Mark your calendars for 9:45 a.m., September 30! We'll start at the Agronomy Farm, Hwy 52 NW, come to the experimental green and also see the new PAT System in the Purdue stadium after lunch. There will be a slide show at lunch, so don't wait on the weather.

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## Drought Continues

It has been ten weeks since many parts of lower Michigan received any measurable rain.

We have had less than one inch since late in May.

Water systems have really had to work. Thank God for the cool weather that accompanied most of this drought.

## PLEASE PARK ON THE GRASS



**Q.** How many times should lawn or turf be replaced, where it is worn and muddy, from cars, trucks, golfers, caddies, and golf carts?

**A.** The next time you reseed can be the last time; if you reinforce the soil with MONOSlabs grids.

**Q.** Have MONOSlabs been installed in any Detroit area golf courses?

**A.** Yes. See for yourself how Oakland Hills uses MONOSlabs to reinforce lawn areas which were continually subjected to wear from wheels and feet.

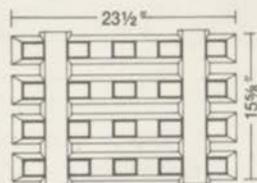
**Q.** How can I find out more about MONOSlabs?

**A.** On the next rainy day, call (313) 549-4046, and George Amber will show (in your maintenance building) the 9-minute British film, "An Environment Story."

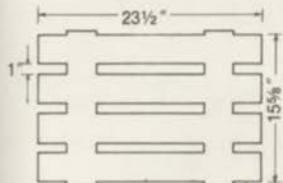


The "parking lawn" shown here has been reinforced by MONOSlab anti-erosion grids, illustrated below.

Yes, the weeds are genuine too!



Top view



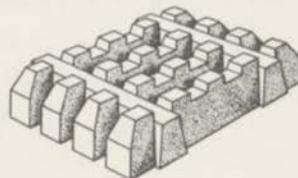
Bottom view

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, turf and soil reinforcing grids, are composed of high-strength freeze-thaw resistant concrete.

Nominal values: 24" x 16" x 4 1/2"; 2 2/3 sq. ft.; 1 cu. ft.; 90 lbs.; 2¢ per lb.; 65¢ sq. ft. delivered.

For light loads (foot paths, walkways, patios, bike trails, tree grills, etc.) lay MONOSlabs bottom-side-up.



For heavy loads (car and trucks, golf carts, aircraft; also for waterways and erosion control) lay MONOSlabs right-side-up.

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From Michigan State we learn that injecting Elm trees with Benomyl at the rate of (2 lbs. per 100 gals.) gives some hope of arresting the dreaded disease (*Ceratocystis ulmi*). Apply at least one gallon of solution to a tree - in holes drilled six to ten inches apart with a pressure injector. If more than 5% of the tree is already affected, removal is recommended. The pressure injector can be assembled by your crew for about \$175.00 to \$200.00. It takes about one hour to drill holes - inject chemical and fill holes and move on to the next tree.

Above: Putting a wooden plug into hole where chemical was injected so healing will be quicker.

Below: Tree injection process for treating Dutch Elm Disease.



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Or you may contact the next golf course supplier who calls on you and give him the information needed for application.

## Important Dates

Don't forget September 10, 1974. This is the Michigan State Field Day at Traverse City Golf & Country Club.

Also

The 9th Annual Turfgrass Research Benefit sponsored by the Michigan and Border Cities Golf Course Superintendents Association will be held September 23, 1974 at Bay Pointe Golf Club.

Your support is needed. Sell your tickets and plan on attending. This project needs your help. In reality, you will be helping yourself and your profession.

A garage mechanic in a tiny New Hampshire village prominently displays the following list of repair charges: "Hourly rate, \$6. If you watch, \$10. If you help, \$15."

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## July Meeting

Host Superintendent Bill Milne on left, discussing the program with Bob Miller of DuPont.

Once again the meeting of the Michigan and Border Cities Golf Course Superintendents Association was held at one of Detroit's finest Clubs.

Chairman, Don LaFond of the arrangements committee is to be congratulated for obtaining the Country Club of Detroit for our July 22nd meeting.

Sixty golfers played in the "Kickers" and 118 came to dinner. Mgr. Joe Gunther outdid himself with one of the finest gourmet meals of the year.

Bill Milne, host Superintendent, supplied us with a superbly conditioned golf course - congratulations, Bill!

Our speaker for the evening was Bob Miller, our friend from DuPont. He spoke to us about the merits of Contact and Systemic Fungicides.

A new product must be effective, competitive in price, easy to apply, and have lasting qualities and now the EPA wants new chemicals to leave the environment rather rapidly. We must determine whether we want to use the chemical for curative or preventive reasons.

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Systemics enter plant at point of contact and only move upward. This is why you want to get as much of the chemical as possible in contact with the crown and roots.

### What Does LD50 Mean?

Pesticides are placed into groups according to the toxicity to test

Continued on Page 17

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### July Meeting Cont.

animals. The toxicity of the formulation to test animals determines the signal word (**danger, warning, caution**) used on the product label. The usual test animals are white rats, but mice, rabbits, and dogs are sometimes used. The most common LD<sub>50</sub> expression represents the acute oral toxicity, that is, the single internal dosage necessary to kill one-half of the test animals. The acute oral toxicity has limitations because it represents only the immediate toxicity of an internal dosage and not the chronic, accumulative effects of any skin absorption or irritation. Several pesticides are absorbed through the skin and several do cause skin irritation.

LD<sub>50</sub> values are expressed in terms of milligram of chemical per kilogram of body weight (mg/kg). Some conversion factors to convert common terms are:

1 ounce = 28.38 grams = 28,380 milligrams  
1 kilogram = 1,000 grams = 2.2 pounds  
mg/kg x 0.0016 = ounces/hundredweight or  
mg/kg  
624 = ounces/hundredweight  
mg/kg x 0.0030 = ounces/180 pounds

Therefore, an LD<sub>50</sub> of 1,000 mg/kg would be 3 ounces of material per 180 pounds of body weight, while LD<sub>50</sub> values of 100 and 10 would be 0.30 and 0.03 ounce per 180 pounds respectively. Since toxicities depend on body weight, it would take only one-third of this amount to be lethal to a 60-pound child and five times as much to kill a 900-pound animal.

The LD<sub>50</sub> values are expressed on the basis of active ingredient. If a commercial material is only 50 percent active ingredient, it would take two parts of the material to make one part of the active ingredient. In some cases chemicals mixed with the active ingredient (adjuvants) for formulating a pesticide may cause the toxicity to differ from that of the active ingredient alone. For example, the LD<sub>50</sub> of

Next Page

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CLEVELAND, OHIO 44102

# America's foremost turf fertilizer



**YOU'RE ENTITLED TO THE BEST**  
Call Us For Your Needs

## **GOLF COURSE CHEMICALS**

(You'll get it - and more!)

**Herb Carson**  
**Marvin Rothman**

**AMERICAN RESEARCH CORP.**

11840 MAYFIELD AVE.  
LIVONIA, MICH 48150  
(313) 522-2400  
Ext. 2401/2402

### **July Meeting Cont.**

2,4-D acid is 320 mg/kg, while that of the ester formulations is 500 to 600.

*REMEMBER: the lower the LD<sub>50</sub> value, the greater the toxicity.* A common standard for comparison is aspirin, which has an LD<sub>50</sub> of 1200 mg/kg or table salt which has 3320.

from: Gregory Patchan  
Ext. Horticultural Agent

### **Grass is Immortal**

Grass is the forgiveness of nature - her constant benediction.

Fields trampled with battle, saturated with blood, torn with the ruts of cannon, grow green again with grass, and carnage is forgotten. Streets abandoned by traffic become grass grown like rural lanes, and are obliterated. Forests decay, harvests perish, flowers vanish, but grass is immortal . . .

Unobtrusive and patient, it has immortal vigor and aggression. Vanished from the thoroughfares and the field, it bides its time to return, and when vigilance is relaxed, or the dynasty has perished, it silently resumes the throne from which it has been expelled, but which it never abdicates. It bears no blazonry or bloom to charm the senses with fragrance or splendor, but its homely hue is more enchanting than the lily or the rose. It yields no fruit in earth or air, and yet should its harvest fail for a single year, famine would depopulate the earth.

John H. Ingalls, U.S. Senator from Kansas 1873-1891.

The truth is that bossiness is, without exception, about the worst way, short of violence, in which to get anything done by others, changed by others, or accepted by others. - DONALD A. LAIRD

# the Hahn GN-3 Aerifier®

The big area tow-behind unit . . .  
brings up to 16,000 lbs. of top dressing per acre.

- ½ ton capacity weight rack is standard.
- Hydraulic lift for ease of transport.
- Easily removed to free tractor for other operations.



- **STRAIGHT LINE AERIFICATION** means taking longer cores from higher, dryer, more compacted area; smaller cores from lower, softer soil with a subsequent leveling action through dragging.
- **PATENTED FLEXI-PRESS SPRINGS** fit over spoons and prevent turf tearing. Spoons come in 'open' and 'thatch' type in ½", ¾", and 1" with Flexi-press to match.
- **THREE GN-3 UNITS . . .** 18 ft. of tow-behind Aerifier® when three GN-3 units are used with the Triplex Hitch. Great for safer athletic fields and healthy fairways.

**Hahn**  
TURF PRODUCTS



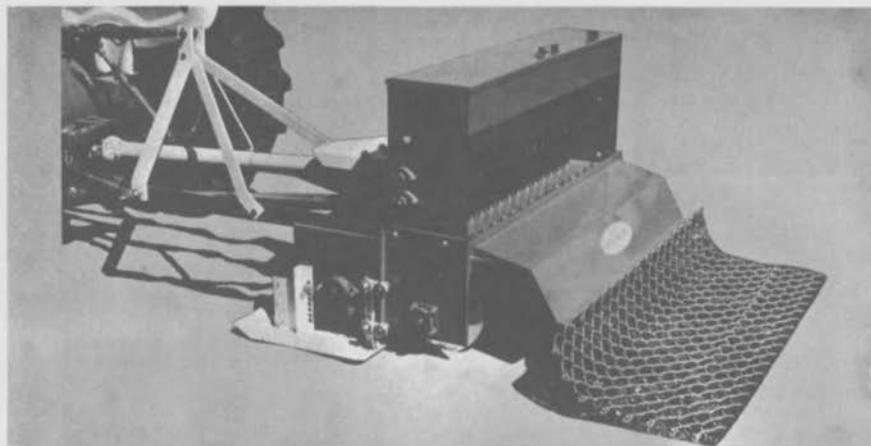
**LAWN  
EQUIPMENT  
CORPORATION**

**Sold and Serviced by:**

520 W. 11 MILE ROAD  
ROYAL OAK, MICHIGAN 48068  
PHONE: (313) 398-3636



# SEEDERS



## MODEL 548-100

SPECIFICATIONS: SEEDER 548-100

Aero-Blade Specifications..... See 548 Aero-Blade above.  
 Seeding Width..... 48 in.  
 Hopper..... 100 lb. capacity.  
 Frame..... All welded steel, hopper bolted to seeder frame.  
 Seed Spacing..... 3 in. seed rows.  
 Seed Agitator..... 1/4 shaft, chain driven from discs.  
 Feed Roll..... Cast and matched with gear and feed gate.  
 Seed Housing Gear..... Cast.  
 Feed Gate..... Cast.  
 Seed Tubes..... 16 tubes with rubber connectors.

Power..... Ground driven by discs.  
 Drive..... Chain.  
 Drive Discs..... 12 in. steel with spring scraper to clear tubes.  
 Dirt Scrapers..... Spring loaded keeps discs clean.  
 Bearings..... Sealed and self aligning.  
 Flo-rate Gauge..... Adjustable—for flow rate and seed size.  
 Shipping Weight..... 400 lbs.

**OPTIONAL EQUIPMENT:**

Seed Flow Speed Up..... A 57 pitch sprocket is available which doubles the rate of seed flow.

# JACOBSEN.

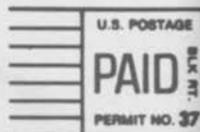
*W. F. Miller*

GARDEN AND LAWN EQUIPMENT COMPANY

1593 S. WOODWARD AVE. BIRMINGHAM, MICHIGAN 48011

TELEPHONE: (313) 647-7700

"A Patch of Green"  
 31823 UTICA ROAD  
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