

A PATCH OF GREEN

MAY/JUNE 1995



- **Regulating Pesticides In Michigan**
- **Design Concepts For Course Plantings: The Basics**
- **Member Profile: Pat O'Brien, Wolverine Golf Club**



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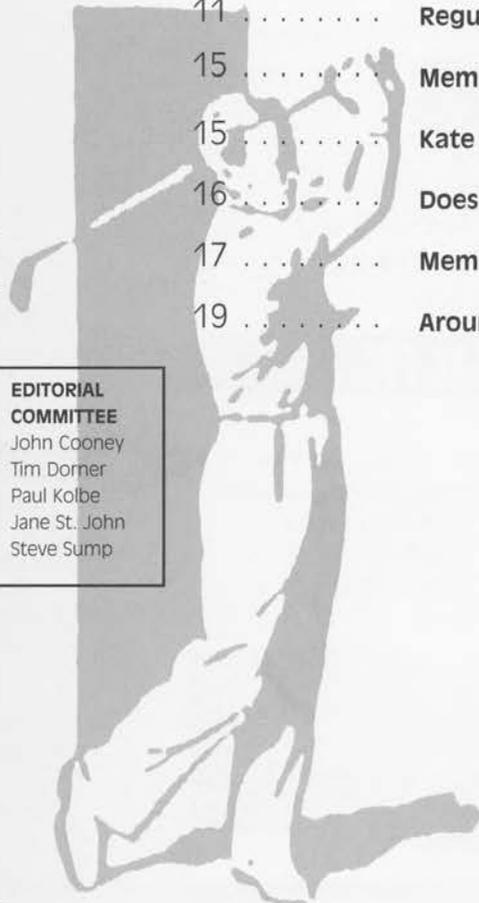
Advertising & editorial offices are at:

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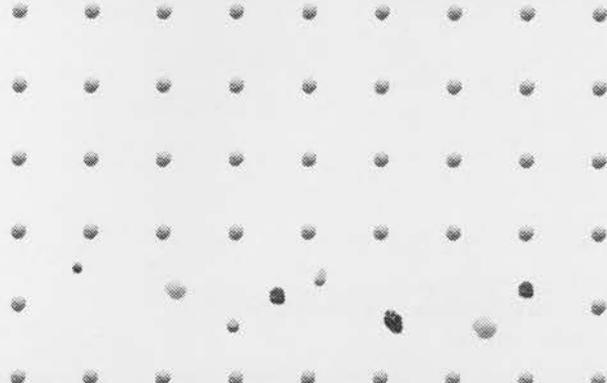


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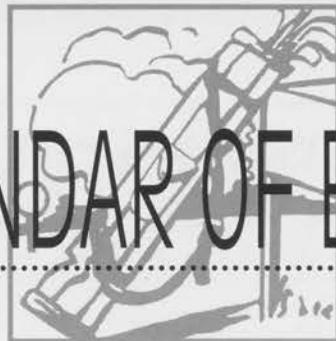
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CALENDAR OF EVENTS



☀ **June 1-4**

Oldsmobile Classic LPGA - Walnut Hills
 Country Club, East Lansing

☀ **June 12**

Membership Meeting - Cattails

☀ **June 20-24**

84th Michigan Amateur Championship -
 Red Run Golf Club, Royal Oak

☀ **July 10-16**

Seniors Players Championship
 at TPC Dearborn

☀ **July 18**

Membership Meeting -
 The Majestic at Lake Walden

☀ **August 7**

The Orchards - invite a member

☀ **August 17**

Turf Field Day at Hancock Center,
 Michigan State University

☀ **September 11**

Membership Meeting - Greystone

☀ **October 24**

Annual Meeting - Maple Lane Golf Club

☀ **December 11**

Year in Review -
 Birmingham Country Club

on par **with the** president



May and June, what can we say about our two busiest months? April showers bring May flowers, so I wish everyone a great start to another season! We survived another midwest winter and hopefully we will survive a new congress with everyone's favorite Newt as our new Speaker of the House. Maybe Paul Harvey's writers will work on destroying the new Contract for America, instead of misrepresenting our work as golf course management professionals. Just when I think the correct information is being communicated to the people of America, people like Mr. Harvey and our new friends from the Audubon Society either speak or write incorrect information on how we are poisoning every living thing in the world. Regardless of all the Washington hoopla, the May flowers will bloom and we will continue setting goals to achieve an environmentally safe golf course atmosphere.

The Board of Directors has had a productive, busy winter season. As you may know, the Michigan Border Cities Foundation has been established with its main objective being the disbursement of funds to the various charities that our organization promotes. We also have been working with the Northern, Western and Mid-Michigan Turf Managers Association developing a statewide turf publication. This is not a simple task and we appreciate the hard work by the editor and committee.

Prior to accepting the challenge of a statewide magazine, the board felt that our Patch of Green publication had to be improved. Paul Kolbe, editor, at that time went in search of an editorial committee that would work in designing a magazine and product to be proud of. While Paul was working for his team, we appointed him an assistant, Tim Dorner from St. Clair Shores Country Club. He has been a fine addition to our editorial staff. Paul was successful in recruiting a group of enthusiastic volunteers to help gather and research material for the magazine. Please welcome our committee members: Jane St. John, Steve Sump, John Cooney and Mike Jones. We commend their efforts; and if you have any information or articles you would like to see in A Patch of Green, please contact one of them. Your involvement is critical to establishing a great magazine.

The first fundraising event of 1995 is the Special Olympics, which will be held at Bald Mountain Golf Course. This four-man scramble has been a very popular event and fills up fast!! If you want to participate, please contact Kate at (810) 362-1108. Last year's tournament was the largest ever, and we expect to surpass our goals again this year.

On a final note, I want to encourage the membership to attend our meetings and seminars this coming year. Much thought and work has gone into scheduling meetings with the other Michigan Turf associations. Your attendance at our meetings will build a stronger Michigan and Border Cities Association and will enhance the fellowship among the fine organizations throughout Michigan. ▽



Jay Delcamp

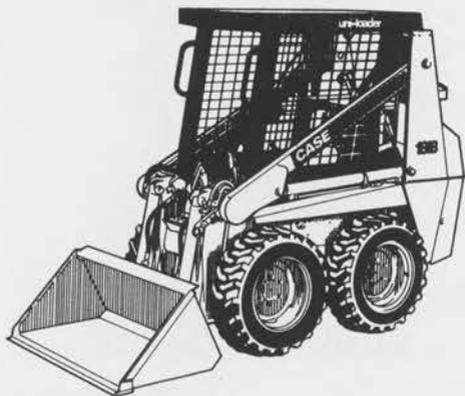
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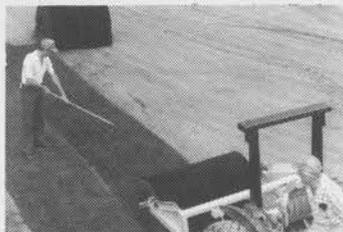
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MBCGCSA Board Approves New Meeting Reservation Policy

NEW POLICY

Prepayment will be required by check for all meetings to be paid prior to the deadline date. Those canceling will be refunded their money, if they call prior to the deadline date. A \$10 administrative fee will be charged at the door for those not making reservations.

This policy was adopted at the last board meeting to aid in expediting the matter of reservations/payment for planned meetings. We anticipate the end result will be very beneficial to all concerned. With a concrete commitment by members, we can better serve the club sites (which have so graciously donated their facilities), aid committee members and, the Executive Secretary and, of course, make the meetings more enjoyable to you, the member.

Check-in should be much more organized, faster and consequently less hectic. We appreciate your consideration, participation and patience

with the transition. We understand some may find this change troublesome, but the positive feedback received from other organizations, which have gone to this mode of operation, has encouraged us to attempt it, as well.

PAYMENT MUST BE RECEIVED BY THE DEADLINE DATE

Announcements will be mailed out one month in advance of the meeting date, giving members sufficient time in which to respond.

If necessary, reservations may be canceled via phone, (810) 362-1108, no later than noon of the deadline date.

If you opt not to make reservations, there will be a \$10 additional administrative fee charged at the door and we cannot, of course, guarantee that a slot on the course or a place at the dinner table is available.

Thank you for complying to this new reservation policy. We know you join us in hoping this action will enhance our meetings and upgrade our professional appearance. ▽

It has recently come to the Board of Directors' attention that the MBCGCSA registry with the Internal Revenue Service may not be in complete compliance. Acting upon this information the Board engaged the aid of an attorney and a CPA, each specializing in nonprofit organizations, to gain a professional opinion of our present IRS status.

After reviewing our financial statements and records, the attorney and CPA made the following recommendations:

- 1. Our present status does not qualify the MBCGCSA as a fund-raising organization under the IRS regulations.**
- 2. To qualify for fundraising purposes, we should form a Foundation specifically organized to raise and donate money for scholarships, research, etc.**

We have contacted the GCSAA for their opinion on this matter, and they agreed that this is the proper way to operate fundraising organizations. Our attorney and CPA also have been in contact with the GCSAA for specific information regarding the bylaws and other pertinent data for establishing a foundation.

New MBCGCS Foundation Formed

by Paul Dushane, Secretary Treasurer

The board is presently awaiting the final recommendations from the GCSAA, our attorney and CPA. The same Board of Directors will oversee all operations of the Foundation for the good of all members. Basically, this is a separation of accounting of monies to legally satisfy the Internal Revenue Service requirements.

As soon as we have the bylaws, etc. in order, the formation of the Michigan and Border Cities Golf Course Superintendents Foundation will be submitted to the membership for a vote of approval. We will notify all voting members well in advance of the date for the approval vote. If there are any questions in the interim, feel free to call me. I will do my best to provide any explanations. ▽

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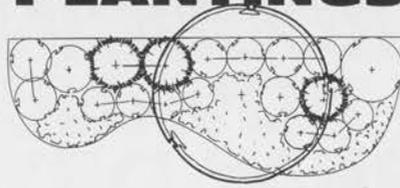
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DESIGN CONCEPTS FOR GOLF COURSE PLANTINGS



By: Mike Jones,
Superintendent,
Lochmoor Club

As turf managers, we know and understand what makes a golf course a "track." These golf courses require shot-making skills and are well maintained, but most of all they have character. This character was captured by the golf course architect, who was able to use the land, water and plants to create the recreation areas that we maintain today. These people had a true understanding of plants and how they affect our individual spaces and functions.

On a smaller scale many of us are asked by our memberships to design that flower bed or a little landscape project around the first tee. It is important for us to use the same principles in these designs as did the architect. Contrary to popular opinion, the use of plants is not to make the landscape beautiful. Planting design is actually a problem solving activity. You must first decide how to use plants to fulfill functional requirements, select plants that not only meet the functional requirements, but also will be visually attractive. The character of the site, the desired mood or theme and all visual aspects must be studied. The planting composition must support the design and contribute to the quality and character of space. The successful integration of these principles and procedures will distinguish one planting design as an art form from another that is haphazard, disorganized and confused.

The first concept to understand in planting is that it is visual art, the arrangement of form, texture and color. The unique aspect of plant design compared to other art forms is that the materials used are not static. The most obvious change is that plants grow, but there also are the subtle changes that are often ignored. There are the variations in character from spring to summer, fall and winter, and the changing patterns of light and shade. Composing these dynamic qualities is the challenge in designing. There are many qualities and principles that should be elaborated on, such as: **1. LINE AND FORM.** Line is a compelling force the eye cannot resist following. How a line is used produces either confusion or an organized pattern. Plant forms are the only permanent design quality and will determine line. **2. TEXTURE.** In plants, texture is derived from the relationship between the foliage and twig size and the remainder of the plant. Texture is the most under-utilized design quality, whereas color has been over used.

The design process starts with composition, which in plant design is a backward process. The last thing you decide is which plants will be used; the first step is to develop an abstract study. An abstract study is the use of squares and rectangles to develop and compose line, texture and color in your plant design.

(continued on page 11)

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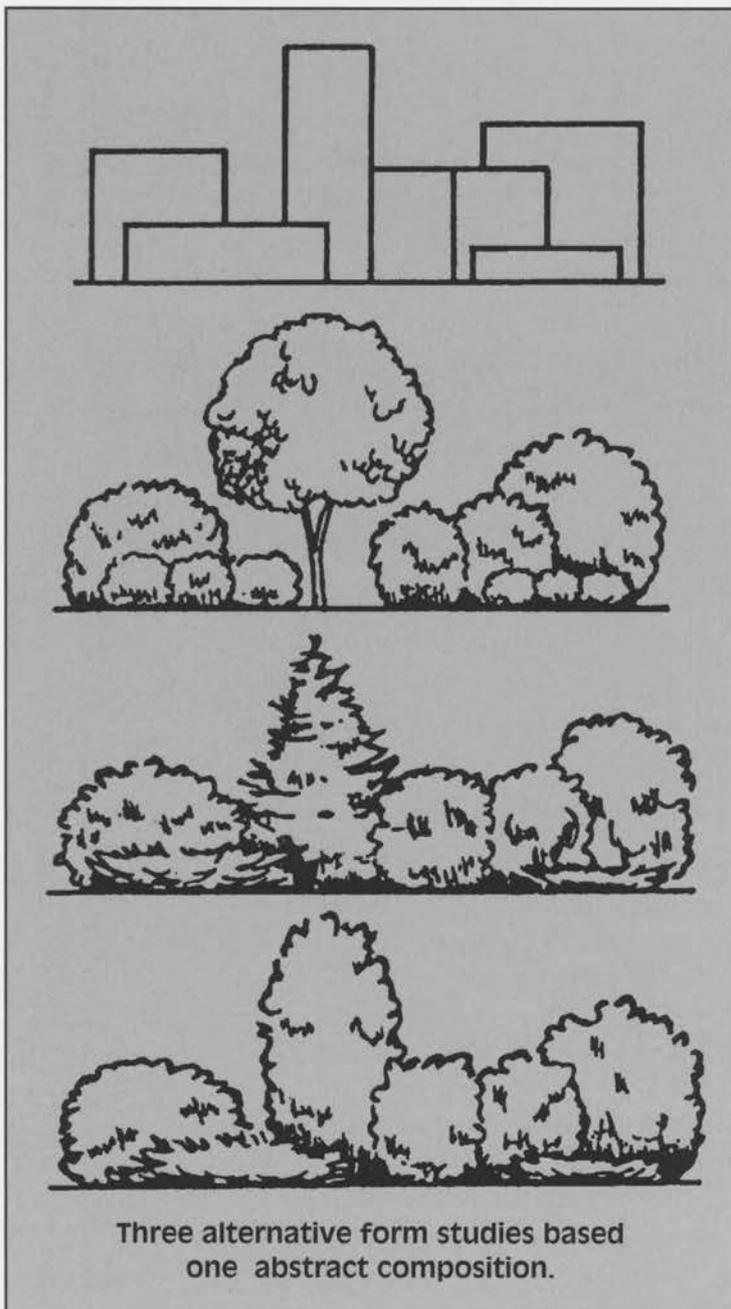
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Within these boxes you may use different forms, textures and colors in order to balance and create the environment you desire.

Form and plan studies should be done directly below the abstract composition. Initials for texture/colors should be placed in the corner of one of the abstract boxes.

The final stage of this process is the selection of the plant material to fit your composition. This can be accomplished by using trade books in which there are descriptions of form, texture and color. An excellent book for this process is *Planting Design: A Manual of Theory and Practice* by William R. Nelson.

The above is a simplistic view of how to do some basic design work. It is a method, though, which can help superintendents compose that perfect landscape project next fall. ▽



Regulating Pesticides in Michigan

By: Brian C. Rowe
Pesticide Enforcement Manager
Michigan Department of Agriculture

The Michigan Department of Agriculture (MDA), Pesticide and Plant Pest Management Division, is the state lead agency for regulating pesticide use in Michigan. During fiscal year 1994, MDA conducted 108 pesticide use investigations based on commercial ornamental and turf pesticide application complaints.

Of the 108 investigations, 30 turf cases and 13 ornamental cases involve violations of the Michigan Pesticide Control Act and companion Regulations. The majority of violations include failure to license businesses, certify or register pesticide applicators, pesticide label misuse, records and service information, failure to notify individuals on the prenotification registry and improper personal protective equipment.

During 1994, the MDA region 7 office (Southfield) conducted 122 road patrol inspections of commercial pesticide application firms. Of the 122 inspections, 70% involved at least one violation. The following list provides a breakdown of the specific areas of violations noted during the road patrol inspections:

| CATEGORY OF VIOLATION | % VIOLATIONS (NUMBERS) |
|-------------------------------|------------------------|
| Certification/Registration | 6% (7) |
| Business Unlicensed | 4% (5) |
| Vehicle Identification | 7% (9) |
| No Spill Kit | 13% (16) |
| Personal Protective Equipment | 36% (44) |
| Leaking Application Equipment | 7% (9) |
| Posting | 7% (9) |
| Service Record Information | 42% (51) |

An expanding look at the personal protective equipment violations indicates relatively few violations of failing to wear long pants or comply with long or short sleeve shirt requirements. The major areas of non-compliance include failure to wear protective footwear or gloves.

An area of the ornamental and turf industry pesticide operations which will receive attention during MDA's 1995 inspection programs is the requirement for mix/load and wash/rinse pads. The specific requirements vary based on type of application equipment and frequency of mix/load or wash/rinse operations. Golf

(continued on page 13)

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continued from page 11

course facilities should be familiar with the mix/load and wash/rinse pad requirements to determine if they need to comply with the above pad requirements.

Each year, MDA conducts at least 150 proactive planned use inspections statewide, involving private and commercial pesticide applicator operations. These inspections are aimed at education and compliance assistance for the regulated community. Both MDA and the applicator have the opportunity to learn from each other, in that MDA can become familiar with pesticide applicators and their operations, and the applicators may become familiar with state and federal regulations.

Other proactive programs that may be of interest to golf course facilities include Michigan clean sweep and container recycling programs. Clean sweep programs assist with proper disposal of old, unusable, canceled or suspended pesticides. Container recycling programs facilitate collection and rendering of plastic and aerosol containers.



The turf industry is fortunate to have Greg Lyman, Turfgrass Environmental Education Specialist with the Michigan State University Department of Crop and Soil Sciences, acting as liaison between regulatory agencies and the Golf Course industry with a forum for compliance assistance and issue resolution.

If any commercial or private pesticide applicator has questions or desires information related to federal and state pesticide use regulations, please contact your local MDA regional office. ▽

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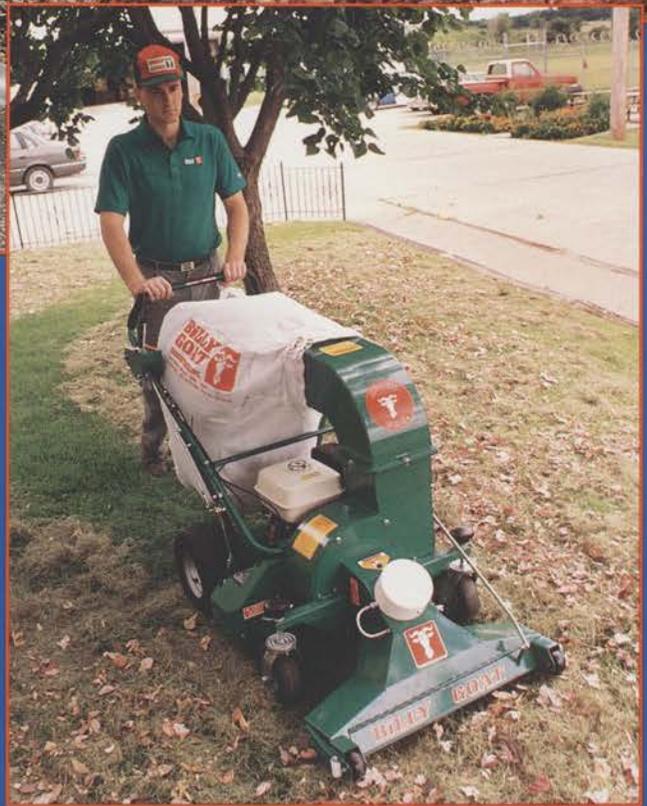
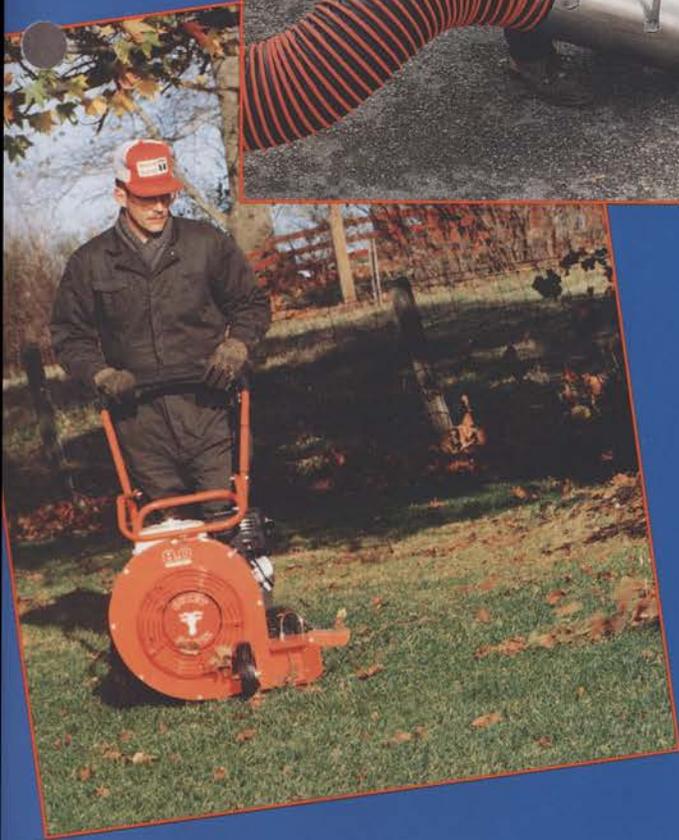
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KD SERIES SPECIFICATIONS & OPTIONS:

| MODEL | ENGINE | FUEL CAPACITY UNLEADED GAS | UNIT WEIGHT (lbs) |
|----------|--------------------------|----------------------------|-------------------|
| PUSH: | | | |
| KD502Q | 5hp Briggs & Stratton | 1.5 Qt. | 115 |
| KD5021CQ | 5hp Briggs & Stratton 1C | 1.5 Qt. | 125 |
| KD502H | 5.5hp Honda | 2.01Qt. | 130 |
| KD502HS | 5.5hp Honda with liner | 2.01Qt. | 130 |
| KD502T | 5.5hp Tecumseh XLC | 1.5 Qt. | 104 |

SELF-PROPELLED:

| | | | |
|----------|-----------------------|---------|-----|
| KD502SPQ | 5hp Briggs & Stratton | 1.5 Qt. | 135 |
|----------|-----------------------|---------|-----|

TERMITE SPECIFICATIONS & OPTIONS:

| | | | |
|-----------|-----------------------|----------|-----|
| TKD5021CQ | 5hp Briggs & Stratton | 1.5 Qt. | 121 |
| TKD502H | 5.5hp Honda | 2.01 Qt. | 133 |

SELF-PROPELLED:

| | | | |
|----------|------------------------------------|--------|-----|
| TKD502SP | 5hp Briggs & Stratton Diamond Plus | 1.6 Qt | 133 |
|----------|------------------------------------|--------|-----|

Available equipment (KD Series & Termite):

| | | | |
|--------|--|--------|-------------------------------|
| 900645 | Plastic bag support | 900806 | Turf/wet weather bag |
| 900655 | Rear caster (hard surface) kit | 900810 | Nozzle wear plate kit |
| 900798 | Heavy-duty bag | 900942 | 4" Homeowner intake hose kit |
| 900801 | Bag dust cover | 900943 | 4" Heavy-duty intake hose kit |
| 900803 | Synthetic felt KD bag (same as original equipment) | | |

LB SERIES SPECIFICATIONS & OPTIONS:

| MODEL | ENGINE | FUEL CAPACITY UNLEADED GAS | UNIT WEIGHT (lbs) |
|-------|-----------------------|----------------------------|-------------------|
| PUSH: | | | |
| LB50Q | 5hp Briggs & Stratton | 1.5 Qt. | 75 |

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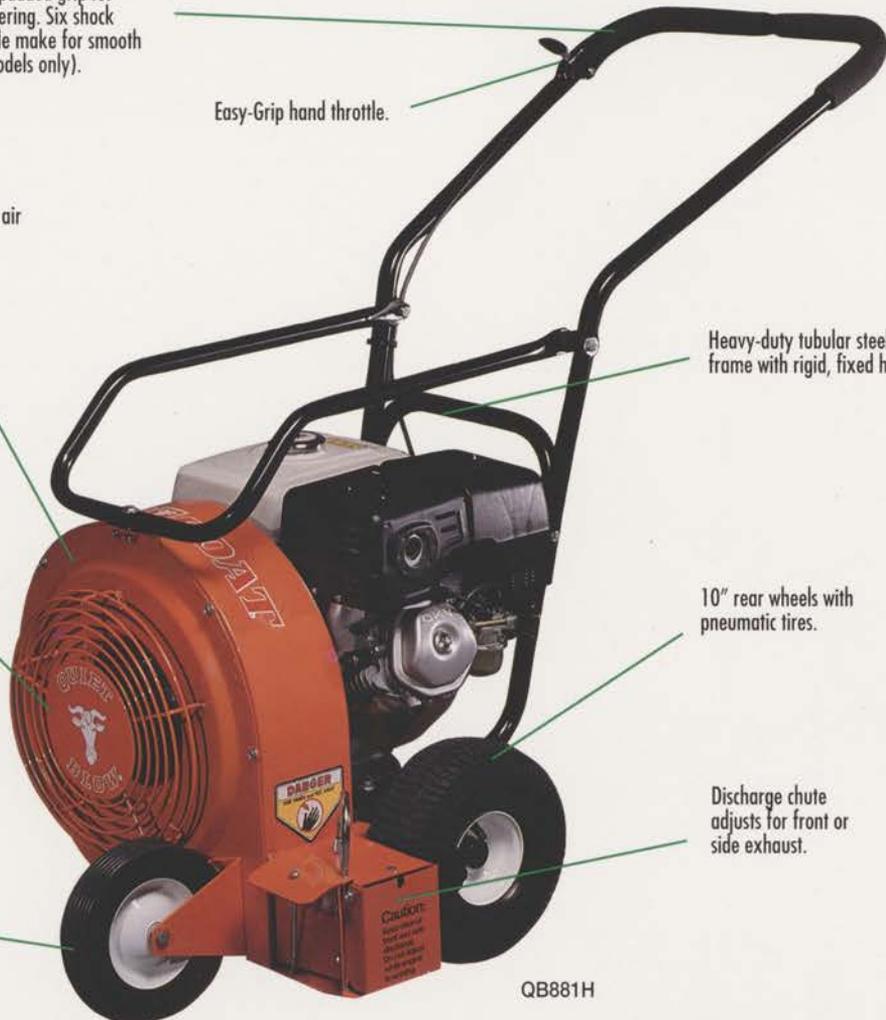
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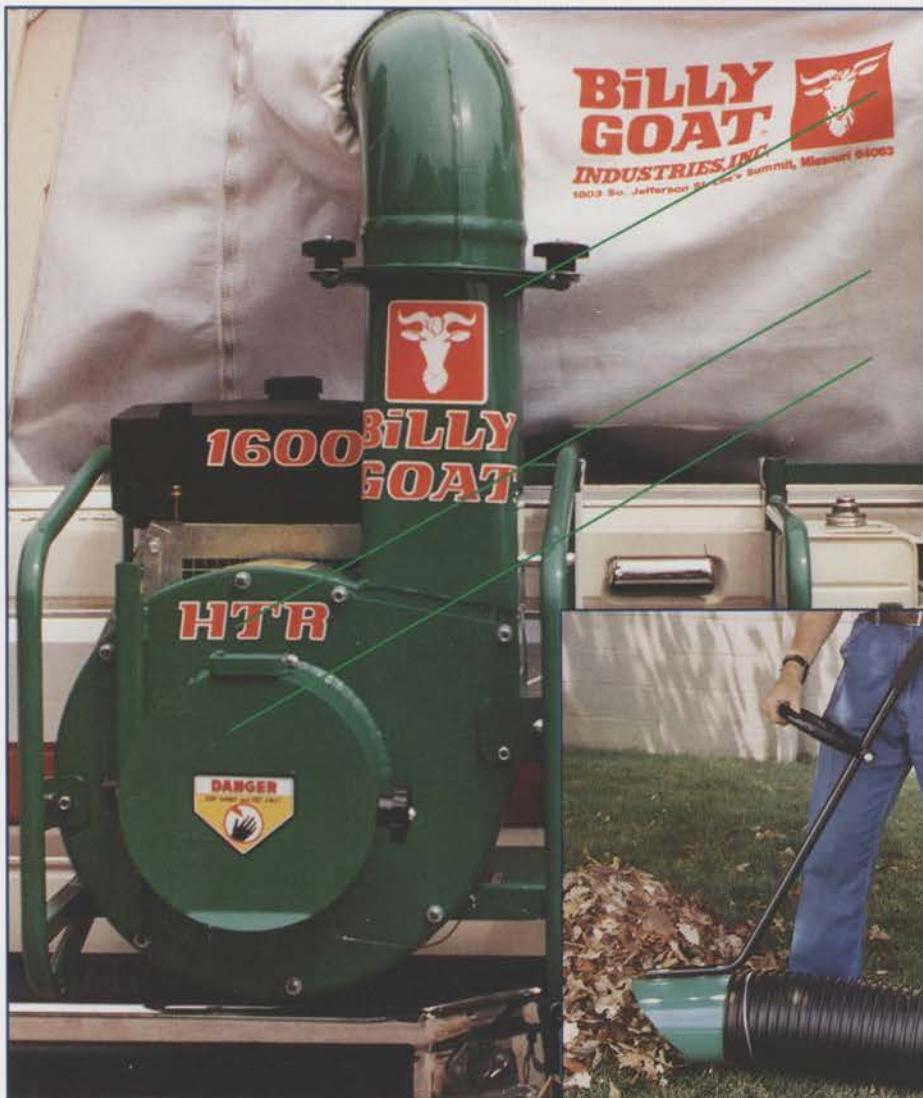
| MODEL | ENGINE | FUEL CAPACITY UNLEADED GAS | UNIT WEIGHT (lbs) |
|----------|----------------------------|-------------------------------|----------------------|
| BL53 | 5hp Briggs & Stratton | 3.0 Qt. | 63 |
| QB501 | 5.5hp Briggs & Stratton | 3.0 Qt. | 100 |
| QB881 | 8hp Briggs & Stratton | 4.0 Qt. | 115 |
| QB881C | 8hp Briggs & Stratton IC | 4.0 Qt. | 116 |
| QB881H | 8hp Honda | 6.4 Qt. | 138 |
| QB1101C | 11hp Briggs & Stratton IC | 6.0 Qt. | 136 |
| QB1101H | 11hp Honda | 7.4 Qt. | 140 |
| QB1601 | 16hp OHV Briggs & Stratton | 7.2 Qt. | 212 |
| QB1601SP | 16hp OHV Briggs & Stratton | 7.2 Qt. | 284 |

Available equipment:

| | |
|--------|------------------------------------|
| 400620 | Crevice cleaner kit |
| 400685 | Gust adjuster kit (QB1601 only) |
| 400686 | Deflector remote kit (QB1601 only) |

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HTR SERIES SPECIFICATIONS & OPTIONS:

| MODEL | ENGINE | FUEL CAPACITY UNLEADED GAS | UNIT WEIGHT (lbs) |
|---------|---|-------------------------------|----------------------|
| HTR1600 | 16hp Briggs & Stratton Twin OHV Vanguard | 5.0 Qt. | 208 |

Available equipment:

| | | | |
|--------|------------------------|--------|------------------------------|
| 810506 | 7" Exhaust coupler kit | 810660 | Bag 1.3 cubic yards |
| 810584 | Panel filter kit | 810705 | 10" x 12.5' Replacement hose |
| 810508 | 7" Exhaust hose kit | 810776 | 10" Connector kit |
| 810637 | 22" Swivel extension | 810990 | Trailer Hitch Mount TR/HTR |

TR SERIES SPECIFICATIONS & OPTIONS:

| MODEL | ENGINE | FUEL CAPACITY UNLEADED GAS | UNIT WEIGHT (lbs) |
|----------|---------------------------|-------------------------------|----------------------|
| TR8011C | 8hp Briggs & Stratton IC | 4.0 Qt. | 161 |
| TR11011C | 11hp Briggs & Stratton IC | 6.0 Qt. | 179 |
| TR1101H | 11hp Honda | 7.4 Qt. | 183 |

Available equipment:

| | | | |
|--------|-----------------------------|--------|----------------------------|
| 810507 | 7" x 12.5' Replacement hose | 810637 | 11" Swivel extension |
| 810508 | 7" Exhaust hose kit | 810660 | Bag 1.3 cubic yards |
| 810523 | 8" x 12.5' Replacement hose | 810990 | Trailer Hitch Mount TR/HTR |
| 810584 | Panel filter kit | | |

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VQ801HPG

PRODUCT SPECIFICATIONS & OPTIONS:

| MODEL | ENGINE | FUEL CAPACITY* UNLEADED GAS | UNIT WEIGHT (lbs) |
|------------------------|--------------------------|--------------------------------|----------------------|
| PUSH: | | | |
| VQ801C | 8hp Briggs & Stratton IC | 4.0 Qt. | 220 |
| VQ801H | 8hp OHV Honda | 6.4 Qt. | 222 |
| VQ801HG | 8hp OHV Honda Propane | 20lbs* | 227 |
| SELF-PROPELLED: | | | |
| VQ801CP | 8hp Briggs & Stratton IC | 4.0 Qt. | 276 |
| VQ801HP | 8hp OHV Honda | 6.4 Qt. | 278 |
| VQ801HPG | 8hp OHV Honda Propane | 20lbs* | 283 |

Available equipment:

| | | | |
|--------|--------------------------|--------|---------------------|
| 820634 | Propane tank kit (27lbs) | 830257 | Ride behind chariot |
| 830255 | 5' x 8' Intake hose kit | 830282 | Turf bag |
| 830256 | Magnetic bar kit | 830284 | Dust cover |

*LP Vapor Gas only.

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BG80PIC Vacuum



BT80VIC Vacuum

BG SERIES SPECIFICATIONS & OPTIONS:

| MODEL | ENGINE | FUEL CAPACITY UNLEADED GAS | UNIT WEIGHT (lbs) |
|------------------------|-----------------------------------|-------------------------------|----------------------|
| PUSH: | | | |
| BG50A | 5hp Briggs & Stratton | 4.0 Qt. | 160 |
| BG60AIC | 8hp Honda or Briggs & Stratton IC | 4.0 Qt. | 176 |
| SELF-PROPELLED: | | | |
| BG80PIC | 8hp Briggs & Stratton IC | 4.0 Qt. | 203 |

Available equipment:

| | | | |
|--------|--------------------------|--------|-----------------------|
| 800081 | Magnetic bar pick-up kit | 800334 | Coupler kit - 5" dia. |
| 800082 | Nylon brush kit | 800336 | Coupler kit - 6" dia. |
| 800084 | Hose kit - 5" dia. | 800359 | Hose kit - 6" dia. |
| 800086 | Hose kit - 3" dia. | 800993 | Bag dust cover |
| 800332 | Coupler kit - 3" dia. | | |

BT SERIES SPECIFICATIONS & OPTIONS:

| MODEL | ENGINE | FUEL CAPACITY UNLEADED GAS | UNIT WEIGHT (lbs) |
|--------------|--------------------------|-------------------------------|----------------------|
| PUSH: | | | |
| BT80VIC | 8hp Briggs & Stratton IC | 4.0 Qt. | 175 |

Available equipment:

| | | | |
|--------|-----------------------|--------|----------------|
| 800077 | Exhaust hose kit | 800552 | Bag support |
| 800334 | Hose coupler kit - 5" | 800993 | Bag dust cover |
| 800521 | 5" Intake hose kit | | |



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PAT O'BRIEN

by Jane St. John

When Pat O'Brien, CGCS, came to Wolverine Golf Club four years ago, he was in for a pleasant surprise. Eager to find a new challenge, he took on the job of managing the 45-hole complex. A private club kind of guy, he was used to dealing with greens committees, board members and golfing members. At Wolverine, he only has to deal with the owner. This has given Pat a chance to really showcase his skills.

Pat always has been eager for new challenges. After completing the turf program at Michigan State University and working for years in the field, he went back to school to fulfill a longtime dream of becoming a landscape architect. Completing his master's degree program was one of the high points in Pat's career. He feels that one must continue to educate oneself no matter what they choose to learn about; exercising the mind is just as important as exercising the body. Pat completed the GCSAA certification program in 1978. He was one of the founding members of the Mid-Michigan Superintendents Association.

Pat came to Wolverine with a long history at private clubs. Wolverine is a veritable golf complex. With 120,000 rounds per year, you can bet it is one busy club. Pat has two assistants and a crew of 25. His crew is made up of about 50 percent retirees, who have come from all walks of life with a wide range of personal experiences. Pat has learned something from all of them.

For Pat, the hardest part of being on a public course has been seeing the abuse that the course takes from the golfers. It has taken him some time to get used to this. Now he can accept it and live with it. That's just the way it is on a public course. On the other hand, Pat has much more freedom to do his job. Claiming to only be able to spend about 10 percent of his time on the actual course, he depends on his assistants to keep him abreast of things.

When asked, "What's new at Wolverine this season?" Pat laughed. "Everything!" was the response. A beautiful new practice facility, complete with lights and heat, also includes a private area for lessons. A new chemical storage building is nearly ready for concrete. Several holes on the golf course are being renovated. Oh, and don't forget the new irrigation updates going in right now, too! The holes undergoing renovations are to be ready for play by June. Pat plans on sodding the entire project by early May.

Pat and his wife, Monica, have three grown children. They enjoy the winter months by going up north to visit family. Both are very active in charity events and prefer to

spend time with their family. Pat hopes to someday be able to spend more time playing golf. He only is able to squeak in a dozen or so rounds per year. One thing that has increased his rounds has been the fall trips he has taken to Pinehurst with his assistant Dave LaBelle.

Pat would like to see our association offer more educational opportunities. He likes getting together and sharing ideas, problems and solutions with fellow superintendents. By sticking together and not being afraid to ask for help, we all benefit. ▽

kate speaking

"Michigan and Border Cities. Kate speaking."

"Hello, Kate. Pete Miller, here."

"Hi, there! What's up?"

"Well, Kate, I've got this great idea for an article for Patch of Green. It's ab..."

"Tell you what, Pete. The best person to call would be Tim Dorner or Paul Kolbe, our co-editors, or a member of the Editorial Committee. They'd love to hear from you. They're looking for articles."

"There's a committee? Who's that?"

"Ummm...Jane St. John, Steve Sump, John Cooney and Ted Woehrle. You might even want to write the article yourself...if you feel comfortable with that."

"Well, actually...I have had some experience in that area. Worked on the high school paper, The Centurion, and did some writing in college. Enjoyed it a lot."

"Sounds good. Go for it."

"I believe I will. Thanks, Kate."

"Anytime, Pete." ☎

Does PCNB Really Work?



By Keith Richards

The reasons for so much snowmold damage while using PCNB are difficult questions to answer. Several factors are involved in the successful control of snowmold when using PCNB. First, it is important to understand the chemical itself. To understand PCNB and its control limits, three areas of information must be known: the chemical's persistence, mode of action and absorbcency.

Persistence: PCNB has a half life of 3 to 6 months (northern winter conditions). PCNB will degrade more rapidly in flooded conditions and can degrade in 6 to 8 hours when exposed to flooded conditions and sunlight. (The sunlight with the water hydrolizes the PCNB.)

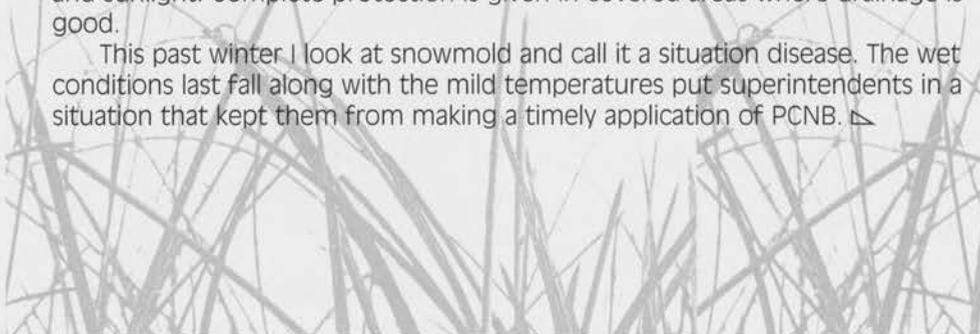
Mode of action: PCNB is a non-systemic fungicide that primarily affects germination of sclerotia and growth of mycelia in the thatch layer. The chemical does not eradicate disease in infected plants.

Absorbency: PCNB is absorbed 10-50 times tighter to the organic material than it is to the mineral portion of the soil.

What do these three areas of information reveal about snowmold control in Southeast Michigan? First, unlike Northern Michigan we often have flooded soils during snowmold activity (wet conditions <60° F). Second, newer courses with less thatch have a smaller control window. Third and most critical is timing. Wet soils often make the timing of the application difficult. In the late fall, superintendents usually wait for the best day to spray weather wise as opposed to the most opportune time for the chemical to be most effective. Finally, with the use of IPM, there is a large gap between the last dollar spot/leaf spot application before the first snowmold application.

Now to answer the question, "Does PCNB really work?" The answer is yes and it works very well. When PCNB comes in contact with snowmold, the fungus is eradicated. In years like last year, the damage that is usually seen is from infected plants last fall; either from application over previously infected plants or plants infected in low lying areas after the PCNB was degraded by water and sunlight. Complete protection is given in covered areas where drainage is good.

This past winter I look at snowmold and call it a situation disease. The wet conditions last fall along with the mild temperatures put superintendents in a situation that kept them from making a timely application of PCNB. ▽



MEMBERSHIP MEETINGS

SALT RIVER GOLF CLUB

March 13, 1995
Host Superintendent:
Jerry McVety

Dr. James Crum, Professor of Crop and Soil Science from Michigan State University, was the guest speaker at the meeting and reviewed the chemical properties of soil science. Following are notes from Dr. Crum's talk.

Two important properties are the Cation Exchange Capacity (CEC) and the pH.

1. CEC Definition: The total quantity of cations which a soil can adsorb by cation exchange, usually expressed as milliequivalents per 100 gram (me/100g).

Two components of Soils - the clays and organic matter gives you the majority of cation exchange sites. Fine texture soils typically contain more clay and, therefore, have higher CECs than coarser textured soils.

Q: What is a good CEC for sand based greens?

A: 5.0 me/100g would be a good number.

Clays range from 3 to 120 me/100 gram, organic matter from 150 to 300 me/100 gram.

Cations are: NH_4^+ , K^+ , Ca^{++} , Mg^{++} , Fe^{++} , Fe^{+++} , Mn^{++} , Cu^{++} , Zn^{++} .

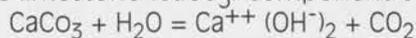
Q: Why does K^+ leach more than Ca^{++} ?

A: Ca^{++} is held stronger on soil particle because it is divalent versus monovalent.

2. pH - Second Important Property in soils.

Definition: Soil pH is actually the negative logarithm of the hydrogen (H^+) ion concentration or $\text{pH} = -\log(\text{H}^+)$. At a pH of 7, the H^+ and OH^- concentrations are both 10^{-7} (.00000001) mole/liter, and the soil solution is said to be at neutrality. As pH decreases to 6, the H^+ increases to 10^{-6} (.000001), and the solution becomes more acid by a factor of 10 with each pH unit decrease.

Importance of pH is correlated with the availability of the 13 essential nutrients with pH of 6.5 as ideal for all nutrients. Sand base greens will have higher pH than soil greens because of the free limestone (CaCO_3) component of the sand particles.



(continued on page 20)



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Around the Course



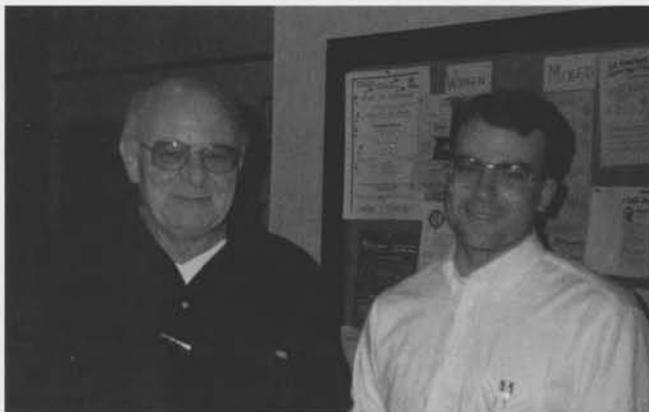
Kurt Kraly, a longtime supporter of Toro equipment, has left Spartan Distributors, Inc. to join W.F. Miller. Kraly's replacement is Tom Gill, who was formerly with Wilkie, Inc.

New Member Jeff Howes recently began working for Spartan Distributors' Southeast Michigan Golf Irrigation Team out of its Auburn Hills location. Jeff spent the last 14 years working at golf courses in Colorado and California. Most of that time he was the superintendent of the Country Club of the Rockies, one of Colorado's most prestigious clubs. Jeff, who graduated from Central Michigan University, relocated to southeast Michigan with his wife Pauline and their two young sons at the beginning of January. ▽



Jeff Howes

The Toro Company-Irrigation Division of Riverside, California, has selected Dale Soderstrom and Jim Volgstadt of Spartan Distributors, Inc. for two of their annual national awards. Dale was chosen as the 1994 National Irrigation Serviceperson of the Year, and Jim was selected as the 1994 National Irrigation Salesperson of the Year. ▽



(L.) Gene Johanningsmeier, president of Turfgrass, Inc., congratulates Todd Griebe, new general manager of the company.

Industry News

During the busy growing season, the *Landscape Crop Advisory Team (CAT) Alert* newsletter delivers timely advice for managing pests. Call (517) 355-0117 for subscriber information.

Century Rain Aid has opened a sixth SE Michigan office/warehouse in Commerce Township. It joins office/warehouses in Southfield, Livonia, Ann Arbor, Washington and Madison Heights. Richard Commyn will manage the new office/warehouse. All Century locations may be reached by phone at (800) 347-4272.

Ten new and improved landscape lighting fixture designs are featured in the new 1995 brochure/catalogue of Vista Landscape Lighting. The free brochure is available from Century Rain Aid at (800) 347-4272, distributor for Vista. ▽

Q: What is the effect of irrigation water on pH?

A: If water is "hard water" which contains calcium, then the pH could be affected. But remember that soils are good buffers. For example, if you take 6,000 sq. ft. by 12 inch soil profiles and add 5% of volume with CaCO₃ (limestone), it would take 31,000 pounds of sulfuric acid to neutralize the limestone. Compare that if the same volume was water and not soil, then it would take only a few gallons of sulfuric acid to neutralize.

Q: Could irrigation water change the soil pH at 2" level?

A: Yes, it is possible, but it would be a slow process.

Dr. Crum showed slides of soil pH from a golf course since 1930's.

Fairways - irrigated, -7.1

Roughs - nonirrigated, -6.2

Effects caused by watering, fertilizing practices.

Dr. Crum concluded his talk by stressing the importance of soil testing and using it to guide you through your turf management program.

The annual bowling event included three mystery games and the infamous color pins which brought out many old dollar bills from some deep pockets. Many thanks to Jerry McVety and the staff for another excellent lunch and hospitality.

OAK POINTE COUNTRY CLUB

Host Superintendent: Tom Schall, CGCS
February 7, 1995

Greg Lyman, environmental turfgrass educator from Michigan State University, was the guest speaker at the February membership meeting. Greg talked about compliance problems facing the industry in 1995, and some common mistakes the turf industry is making based on reports from Michigan Department of Agriculture inspections.

A new federal bill related to farmers, the Farm Worker Protection Act, was enacted. A farm is defined as farms, nurseries, greenhouses or orchards. Golf courses are commercial businesses not producing a commodity. All farm chemical products will have Restricted Entry Intervals (REIs). The minimum REI will be 12 hours. Very few turf chemicals have REIs, and continual posting of spraying will help avoid permanent REIs on all turf chemicals. Continue to read labels and instructions and communicate with your workers and golfers on your pesticide applications.

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The Michigan Department of Agriculture in 1994 spent time investigating industries with less emphasis on golf courses. Greg reasoned that the golf course industry is complying with new regulations 636/637, but in 1995 will show an increase in M.D.A. inspection of golf courses. There are two mechanisms the M.D.A. checks on industries:

1. Road Check. M.D.A. can stop and investigate a spraying process they see occurring. They can stop the individual and ask questions about anything pertaining to the application. They can immediately correct problems or cease your spraying if they find dangerous spraying techniques being used.

2. Plant Use Inspection. A specific date will be established. They will go through a checklist of maintenance shop procedures and operations. They will definitely check on certified applicators and proper record keeping of pesticides. All restricted spray records must be kept on file for 3 years, and common pesticides for 1 year. On records include the following minimum:

1. *Name, total amount used and concentration of pesticide*
2. *Target Pest*
3. *Date*
4. *Method of Application*
5. *Location*
6. *Full name of applicator - avoid initials or nicknames*

Under standards of applications you must have access to spill kits, even while spraying and must provide Personal Protection Equipment (PPE) to your applicator. A Drift Management Plan explaining how to minimize drift of the applied chemical. Anti Siphoning Device or air gap between the hose and water level in tank. Also, having access to emergency phone numbers is very critical and you should explain emergency procedure to your staff. M.S.U. Extension Bulletin AM-37 con-

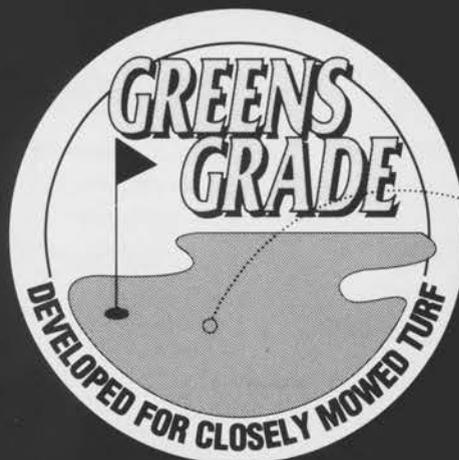
tains pesticide emergency information and cost \$0.35. It can be posted in an appropriate place.

Greg shared a survey examining commercial pesticide application firms (lawn care industry) for 1994 on 122 road checks taken place. 30% had no violation, 70% had one or more violations with the majority of those being PPE violations and not leaving enough information about the application to the customer. Communication is the key to compliance. (See related

(continued on page 23)



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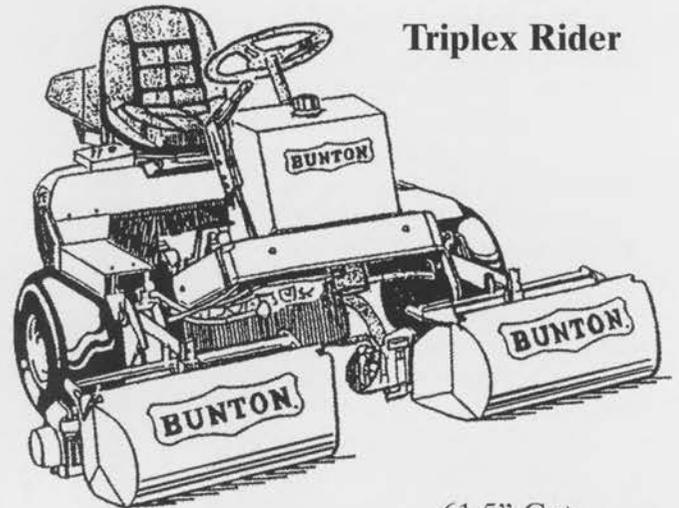
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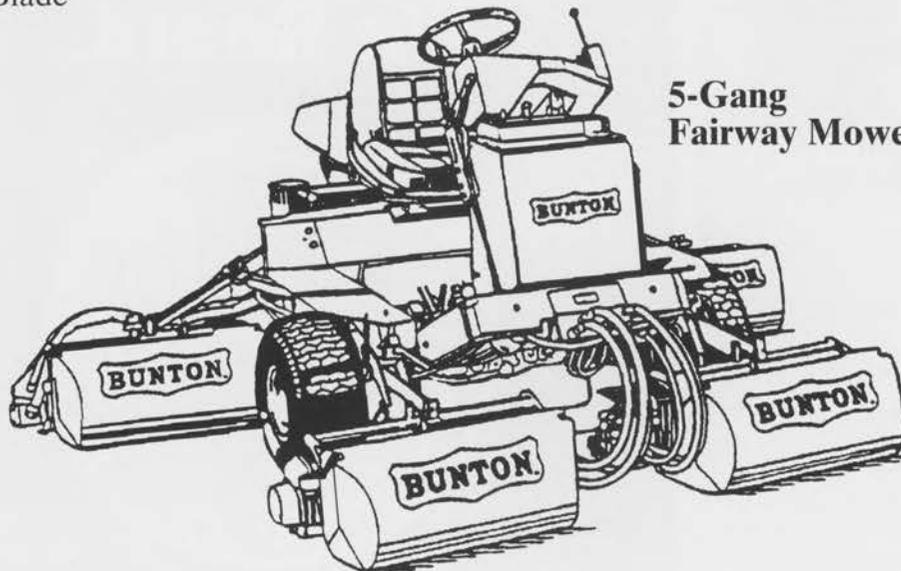
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continued from page 21

article by Brian C. Rowe on page 11.)

Thanks to Greg Lyman and continued support in providing information to our industry and to Oak Pointe C.C. personnel. The beautiful clubhouse adds to the 36 holes available to the membership and they should be proud of it. ▽

The February membership meeting was held at Oak Pointe Country Club. Superintendent Tom Schall, CGCS, was the host.



Turfgrass educator Greg Lyman, (left), talks with former MBCGCSA president Kevin Dushane, superintendent of Bloomfield Hills Country Club, after the membership meeting.

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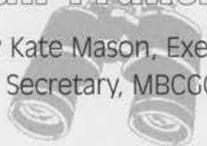
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Exploring San Francisco

by Kate Mason, Executive
Secretary, MBCCCSA



Congratulations to those who were fortunate enough to include your spouses and/or families in your visit to San Francisco for the GCSAA convention. You provided them with a wonderful time! Whether they signed up for the Spouse Program or toured on their own, San Francisco's sights are unbeatable. Hope you found time to enjoy it with them.

Approximately 400 people participated in the Spouse Program this year. A new concept was introduced, offering a "menu" of options. The option to choose between the Basic Social Program, Optional Tours/Seminars or both was designed with the hopes of satisfying all participants.

The "Basic" allowed admittance to the Opening Session and Reception, all GCSAA and allied association sessions, the Trade Show and Social Center.

Tours & Seminars were available at additional fees. Thirteen planned tours ranged from museums to a hike in the woods. "Children recommended" activities included: The Exploratorium, Academy of Sciences, Hike through the Red Woods, Escape to Alcatraz and Walk the Golden Gate Bridge. The "Adults Only" tours offered a Victorian Home

Tour, Adult Museums and the Sonoma Village and Wine Tour.

Possibly, you bravely struck out on your own. Merely traveling down Mason Street to the drugstore for a new supply of shampoo or venturing all the way to Fisherman's Wharf for a delightful seafood lunch and visit with the barking sea lions was quite an excursion. The cable cars provided an "invigorating" view of the city, while scaling those unbelievable hills. I couldn't have conquered them any other

(continued on page 27)

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continued from page 25

way, and yet I heard of those who tried and vividly relived the "nose to the pavement" experience.

I'm sure if you frequented the Michigan Hospitality Room, you too heard the recounting of numerous tales. Be they fascinating, funny or even frightening, they're unforgettable. Tom is still relating our "food" experiences to family and friends. The restaurants were prolific and varied, offering

everything from a gourmet deli lunch of "melt-in-your-mouth" croissants to a five-course dinner at the "Aqua." (His mouth is still watering over that meal.)

Yes, we left San Francisco with many memories and look forward to Orlando next year. Hope to see you and your family there. Should be another great time. ▽



Interactive TV

by Jon Shreve

I recently had the distinct pleasure of sitting in on the Michigan State University (MSU) interactive television class at Groves High School in Birmingham. The class was conducted simultaneously in Birmingham, Lansing, Flint, Grand Rapids and Gaylord. The instructors in Lansing can see the students at all sites, and students at each site can see their fellow students at the other sites.

The class was held on Tuesdays and Thursdays from 6 p.m. to 9 p.m., from February 28 to April 4. One class was canceled because of weather, but was made up at the end.

The instructors from MSU included: Dr. Paul Rieke, Dr. Bruce Branham, Dr. Joe Vargas, Dr. David Gilstrap, Greg Lyman and Dr. Dave Smitley. The topics covered included: fertilizer carriers, insect identification, grass plant identification, laws and regulations, disease activity and water use and quality.

The cost of the class is \$225, plus \$25 for the workbook, which works out to be \$7.50 per hour of instruction. Certified applicators received recertification credits for the class.

My initial impression of this interactive television class was very positive. I see real potential for this technology to provide working superintendents an opportunity to upgrade their education, interact with all the professors at MSU and share ideas and information with superintendents across the state without traveling far from their home towns. ▽

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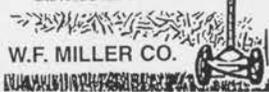
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