deposits one one-thousandths of an ounce of cadmium, about 1/100 the weight of an average grain of sand, in every 22 tons of soil, the average weight of 100 square feet of soil six inches deep.

There is nothing in Milorganite that is not also found in the surrounding environment. No "new" chemicals are created in the manufacturing process. Even heavy metals are in rainwater, drinking water, soils, foods and the air. They also are in items we use every day such as mouthwash, toothpaste, toilet paper, bath soaps, baby oil, shaving cream, pesticides and other fertilizers. A person will take in much more of these substances in what you eat, drink or smoke than they ever will from using Milorganite.

For heavy metals to get into a person's blood stream the substance carrying them must be ingested or inhaled. It is extremely unlikely anyone would eat turf, soil or Milorganite. But, even if they did the likelihood of ingesting enough cadmium to be dangerous can be illustrated using the example of vegetables: if an 18 year old person, who was a strict vegetarian, ate vegetables that *only* he grew (in soil with an unadjusted pH) fertilized with a sewage sludge containing about 75 ppm cadmium (twice the Milorganite level) for 50 years he *might* acquire enough cadmium to *possibly* cause a problem.

Another way to think about this is that a person would have to eat between 1½ and 6 pounds of Milorganite a year before exceeding the upper limit of cadmium intake recommended as safe.

Concentration through inhalation has been ruled out in the tests showing MMSD employees' blood to contain no more heavy metals than non-employees'.

Milorganite also has the backing of both the Federal Environmental Protection Agency and the Wisconsin Department of Natural Resources. Milorganite qualifies as a "non-hazardous" substance according to the EPA. The Wisconsin DNR allows up to 7 times as much Milorganite to be applied to farm fields as would be applied to turf when following package instructions.

ALS existed before Milorganite was produced.

ALS occurs in countries where Milorganite is not, and never has been produced.

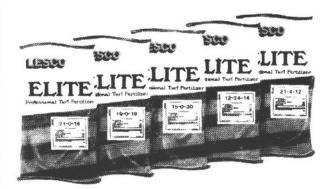
For 61 years, Milorganite has helped golf course superintendents and other turf managers maintain the highest quality turf. The MMSD will continue to produce and market Milorganite. It will also continue to offer the quality services of the Turf Service Bureau which includes the free soil analysis service.

As always, Milorganite will still have the qualities of:

- not burning,
- releasing all nutrients, major as well as micronutrients, especially iron, slowly as the plants need them.
- helping to break down thatch,
- helping to prevent various diseases and nematodes,
- adding valuable organic matter (75%) which increases the cation exchange capacity in sandy soil, the type of soils used in today's greens,
- indefinite storage because it will not cake,
- ability to melt ice and snow safely.
- and much more.

These facts are intended to answer any questions that may have come up with the recent publicity about Milorganite. If there are any other concerns the Marketing Staff at Milorganite will be more than happy to provide further information.

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Milwaukee to Host USGA Regional Conference in April



Jim Farrell, Manager of the Mid-Continent Region of the USGA Regional Affairs, has announced that their annual conference for the region will be held on April 9, 1987. Westmoor Country Club, located at 400 South Moorland Road in Brookfield, will serve as the meeting site. The conference was last held in the Milwaukee area in 1984. It is being offered by the USGA in cooperation with the Wisconsin Golf Course Superintendents Association and the Wisconsin State Golf Association. The luncheon and registration fee is \$30.00 if prepaid and \$35.00 if paid at the door. Jim asks that reservations be made by April 2 by using the reservation form below. Highlights of this outstanding program are noted here:

Morning Session: 9 am to 12 Noon

8:00 Registration - Coffee & Rolls

9:00 WELCOME
Charles N. Eckstein, Member
USGA Green Section Committee
Hazel Crest, Illinois

9:15 THE STATE OF THE ART James M. Latham, Jr., Director Great Lakes Region USGA Green Section Brown Deer, Wisconsin

9:45 ALL YOU EVER WANTED TO KNOW ABOUT PEAT Dr. Wayne R. Kussow University of Wisconsin Madison, Wisconsin

Our best to the "GREENEST THUMBS" in the State...

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WISCONSIN SECTION PGA OF AMERICA

10:15 BREAK

10:30 VIDEO TAPES - A NEW ERA IN COMMUNICATION Don Sweda, CGCS Beechmont Country Club Cleveland, Ohio

11:00 C-15 GREEN CONVERSION - OR

— WHY DID IT HAPPEN TO US?

Reed Mackenzie, Green
Chairman
Çhrist Hague, CGCS
Hazeltine National Golf Club
Chaska, Minnesota

12:00 LUNCHEON

Afternoon Session: 1:30 pm to 3:30 pm

1:30 THE KEEP PACE PROGRAM— A SOLUTION FOR SLOW PLAY Matt Pekarek, Manager Village Links of Glen Ellyn Glen Ellyn, Illinois

2:00 MARKING AND DEFINING THE COURSE James A. Farrell, Manager Mid-Continent Region USGA Regional Affairs Crystal Lake, Illinois 3:00 U.S. OPEN FILM "A Vintage Year"

3:30 QUESTIONS, ANSWERS, AND ADJOURN

USGA REGIONAL CONFERENCE Thursday, April 9, 1987

Reservations should be made by April 2

Registration forms to be Mailed to: James A. Farrell P.O. Box 616 Crystal Lake, IL 60014 (815) 459-5590

Gentlemen: Jackets Required

Luncheon and Reservation Fee: \$30.00 if prepaid. \$35.00 if paid at the door.

RESERVATION FORM

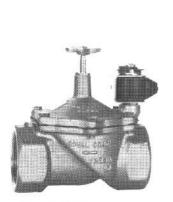
Enclose \$30.00 for each Luncheon Reservation payable to United States Golf Association or pay \$35.00 per person at the door.

Lunch and Registration Fee enclosed \$30.00

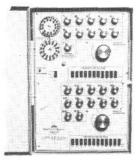
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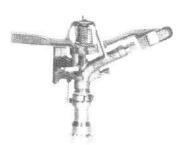
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Scott MacIntyre 1(800) 323-2352

HARRISON ENDS FOUR YEARS AS WTA PRESIDENT

By Monroe S. Miller

Longtime WGCSA member Tom Harrison passed the gavel of the Wisconsin Turfgrass Association presidency to Terry Kurth at the WTA's annual meeting and conference. The meeting was held at the Waukesha County Arena on January 13th, 1987.

Tom was one of the founders of the WTA and served as president for 1983, 1984, 1985 and 1986. He guided the WTA through a period of substantial growth and leaves the association in good posture for upcoming years. A plaque presented to Tom at the annual meeting summarizes his contribution well: "A testimonial of sincere appreciation of the splendid leadership and time generously given."

Tom remains on the WTA Board as past president. Wayne Otto and Dewey Leak were elected to the Board

of Directors at the January 13th meeting and they join WGCSA members Curt Larson, Red Roskopf, Roger Bell and Monroe Miller on the Board.

Nice job, Tom. You're going to be a tough act to follow.



WTA Past President Tom Harrison with plaque of appreciation for dedicated service.

EXTRA! READ ALL ABOUT IT! EXTRA! MILORGANITE DECLARED INNOCENT!

By Monroe S. Miller

Despite the efforts of a UW-Madison researcher and a Milwaukee newspaper to convict Milorganite as a cause of ALS (amyotrophic lateral sclerosis - Lou Gehrig's disease), a jury of state and federal officials cleaned the MMSD product of those unfounded, unjustified, unfair and untrue charges. At a meeting held in the University of Wisconsin-Madison Hospital and Clinics on February 19th it was determined that there is *no* need to further study whether Milorganite is tied to ALS. Those officials, composed of physicians and epidemiologists, criticized Benjamin Brooks, an ALS researcher at the UW-Madison, for the comments he made suggesting that the heavy metals found in sludge should be studied as ALS suspects. It was this irresponsible suggestion that took Milorganite into the headlines here in Wisconsin and all across the country.

Brooks was widely quoted in the media as saying that the incidence of ALS in Milwaukee was significantly higher than in the rest of Wisconsin or the rest of the country. He was also quoted from coast to coast as saying that the ALS death of two San Francisco 49er football players might have been the result of their exposure to the Milorganite used to fertilize the team practice field. Later investigations turned up no evidence that Milorganite had even ever been used during that time. But the damage to MMSD had been done by then.

Brooks was taken apart at the meeting in Madison by the seven or eight physicians and epidemiologists present. Dr. A.A. Rimm, an epidemiologist with the Medical College of Wisconsin, told Brooks: "I sort of feel you have found a product guilty of murder, and it's innocent." He pointed out that there is no difference between the ALS death rates in southeast Wisconsin (Milwaukee) and the rest of the country. Rimm also accused Brooks of "shooting from the hip". Henry Anderson, Chief of occupational and environmental medicine in the Wisconsin Department of Health and Social Services, told Brooks that "associating ALS with Milorganite was premature and speculative." Yet another physician, Dr. Henry M. Goldberg of Milwaukee, said, "No scientist here (at that Madison meeting)

feels there is any connection between Milorganite and ALS. I have trouble with the logic of Brooks' proposed study.' And finally, Dr. Patricia Murphy, an EPA epidemiologist from Cincinnati, summarized the meeting best when she told Brooks: "There is no evidence to indicate an increased incidence of ALS in Milwaukee or Wisconsin."

Brooks, apparently shaken and shocked that anyone would question him, was taken aback by the attack on his actions. Dr. Murphy said the scare had "initially been blown out of some groundkeeper's imagination," referring to the 49ers football team. Then, Peter Parthum, a physician with the Milwaukee Health Department, said it wasn't uncommon for scientists to be "sucked in" by incomplete information. THAT DOESN'T EXCUSE BROOKS. I wonder if he'd like to make up for lost Milorganite sales for the next couple of years out of his own pocket? Dr. Rimm criticized Brooks for doing epidemiology work when he was unqualified and incompetent to do so. Dr. Anderson reminded Brooks that medical researchers had to distinguish between skin contact with a substance like Milorganite and exposure to that substance. There is an enormous difference

To put this whole issue to rest forever, MMSD will continue studying Milorganite and ALS. "I want Milorganite to have the clean bill of health it deserves," said district chairman Dean Showers. Pat Marchese, MMSD Executive Director, said on February 19th that a special team was preparing a plan and cost estimates for that study.

All WGCSA members can help Bob Welch, Jim Spindler and the rest of the MMSD staff most by informing club members, golf players, neighbors and friends that Milorganite is INNOCENT OF ALL CHARGES. It is safe to use, as we all knew it was, and it remains one of the premier turf fertilizers ever marketed. As for Benjamen Brooks, I think maybe, just maybe, the humiliation he has suffered has taught him a lesson. I guess we won't have to go to the UW hospital to tape his mouth shut; hopefully we aren't going to hear from or about him for a long time!

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40	0.42	3.4
50	0.30	28.0
60	0.25	25.9
70	0.21	23.5
100	0.15	18.0
140	0.10	0.2

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NEWS



Wisconsin Turf Honored in Phoenix

GRASSROOTS advertiser Wisconsin Turf Equipment Corporation from Janesville received two awards from Jacobsen Division of Textron during the GCSAA Conference and Show in Phoenix. They won a "Distributor of the Year" award for outstanding promotion and sales of Jacobsen products. That award made them eligible for induction into Jacobsen's elite "Golden Reel Club", which they received during the Jacobsen awards breakfast on January 31, 1987. The club recognizes those distributors who have been awarded the "Distributor of the Year'' six times. Ralph Christopherson accepted both honors. Congratulations to Curt Larson and his staff!



Ralph Christopherson accepts "Distributor of the Year" Award from Ned Brinkman and John Dwyer of Jacobsen.



Ralph Christopherson was inducted into the Jacobsen "Golden Reel Club" in Phoenix.

New Milorganite Marketing Division at MMSD Formed

Some good news from our friends at MMSD - a new Milorganite Marketing Division has been formed and is staffed as follows: Bob Welch is the Manager of Sales and Distribu-

tion, Mike Malk is the Manager of Market Development, Jim Spindler is the Manager of Agronomic Development, Barbara Davis is the Customer Service Representative, and Shelley Biro is the Department Secretary.

Lebanon Honors Wisconsin Turf & Horst

Greg Senst, Regional Sales Manager for the Lebanon Chemical Corporation, was pleased to recognize both Horst Distributing and Wisconsin Turf Equipment for their 1986 accomplishments in the sale and marketing of Country Club fertilizers and granular pesticide materials. The awards were made in early 1987.



Horst Distributing received special recognition for the sales and marketing of Country Club Fertilizers and Chemicals. John Motimer.



Wisconsin Turf received special recognition for the sales and marketing of Country Club Turf Products. Left to right: Dennis, Lyle, Curt.

Noer Foundation Appointment

Jim Spindler has been elected as the new Agronomist and Research Coordinator of the O.J. Noer Research Foundation. He replaces the retiring Charlie Wilson.

Irrigation Show Scheduled

Century Rain Aid, a long-time GRASSROOTS advertiser, has scheduled a major irrigation show for March 17 and 18 at the Southfield, Michigan Civic Center. They are expecting 1,000 visitors at what is the midwest's largest event of its type. Forty manufacturers of irrigation and landscape equipment and materials will exhibit at the show. The theme is "Planning Produces Profit" and it will give irrigation users an advance look at the season's newest products.

Call Mark Gunderson of Century Rain Aid at 313-588-2992 for more information and registration details.



Toro Spartan 9-gang fairway mower 84" National mower with 10 h.p. Wisconsin enginer

76" Toro Professional mower with a 10 h.p. enginer

K-65A Diadem 3-point hitch rotary fertilizer spreader

Two West Point verticuts Oklahoma power spiker West Point GL-3 aerfier

All items for sale on "best offer" basis. Call Wayne Otto at Ozaukee Country Club: 414-242-0142

1974 Toro GM3 Triplex greensmower with 14 h.p. Kohler engine; unit is in running condition. Asking \$500.

1984 84" National mower with 12 h.p. Kohler engine. Electric start and excellent condition. Make an offer.

54 Weathermatic K70 sprinklers and parts inventory. Very good to excellent condition; some are brand new.

Make an offer. Call Rod Johnson at Pine Hills Country Club: 414-458-6048