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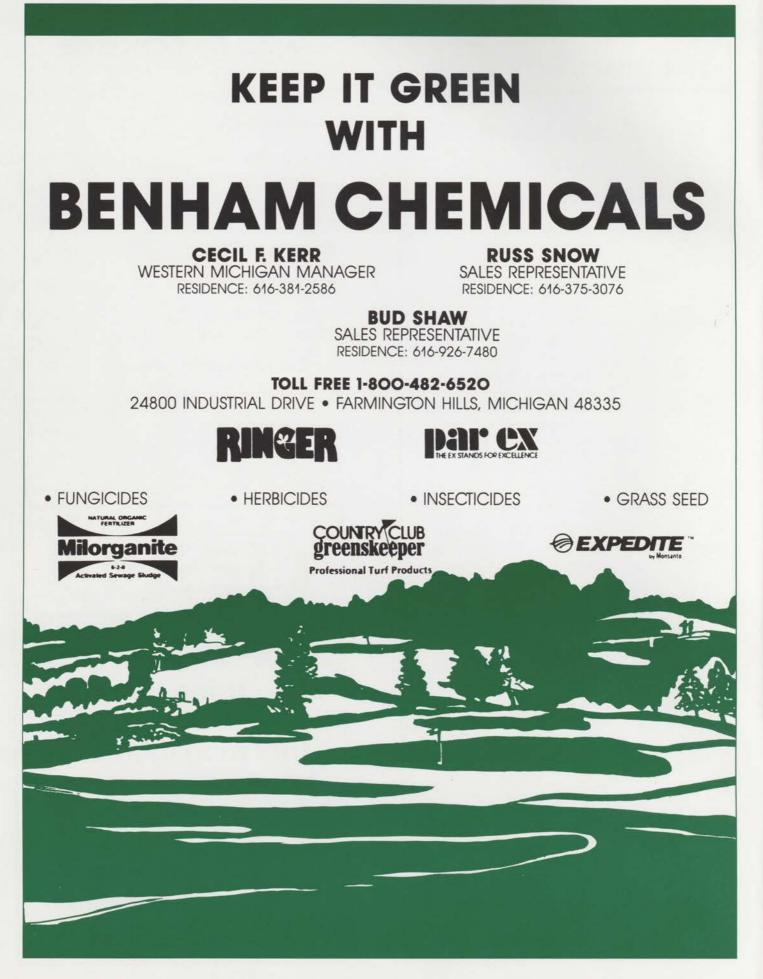
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PRESIDENT'S MESSAGE

Now that winter has set in upon us, we have the time and many opportunities to get a little bit smarter. If you are at all like me, you have been piling up magazines and now will consolidate a year's worth of reading into the next four months.

There are also many conferences, seminars and schools throughout the winter months that are available to the enquiring mind. On a national and international level there is the GCSAA Turf Conference and Show in New Orleans, February 10 - 17. In Lansing the Michigan Turfgrass Foundation put on its annual Turf Conference, which was held on January 20, 21, and 22. The Golf Association of Michigan also puts on a yearly seminar, which will be held at the Country Club of Jackson in March. Last year's program was excellent and I hope this year's is as good.

On a smaller scale there are several companies that offer schools that avail us with much valuable and pertinent information for the upcoming season. These schools include Fertilizer and Chemicals Usage, Equipment and Irrigation Repair and Maintenance, and more.

The Western Michigan GCSAA is very strongly committed to education. This year we will be having fewer formal meetings, but for the meetings that we do have we hope to have a good speaker with relevant subject matter for your benefit. I would like to single out one valuable meeting that I strongly urge every superintendent and assistant to attend. That is our March Round Table Discussion. This format has been going on for several years and has improved its attendance each year of its existence. The speakers are not pathologists from Polytechnic Institute or Soil Researchers from the University of Georgia, but fellow superintendents from the Western Michigan GCSAA. The agenda is very simple. Our education chairman usually will line up about six or eight superintendents to speak on various subjects of concern to them and hopefully to you. Usually the presentations are made with questions and discussion following. Many times the speaker will encourage questions during his presentation. Regardless if the discussion is during or after the presentation, the ideas that are exchanged are usually extremely valuable to all in attendance.

This year's Round Table Discussion will be hosted by Harry Schuemann at Crystal Springs Country Club. That date has not been set yet, but we will be getting that information to you soon. I hope to see you there and at other meetings this winter.

Chris Fochtman





RICHTER'S RAMBLINGS

Early in December I attended the Ohio Turfgrass Conference in Cincinnati and was very impressed by the quality of the talks and the trade show. If a superintendent is unable to attend the GCSAA Conference and Show, the Ohio Conference would be a great substitute. The educational program has nationally known turf researchers such as Drs. Petrovich, Niemczyk, Riordan, and Danneberger to mention a few. And the trade show is similar to the national on a half scale, with all of the major equipment, fertilizer, and chemical dealers present. The Conference is held either the first or second week of December in Cincinnati or Columbus.

Congratulations to John Mastenbrook on his recent move to Bayview Golf Club in Petoskey, where he was hired as the superintendent. Also to Steve and Cathy Adamczyk on their latest addition, Caroline.

Bill Madigan had a successful elk hunting trip to Alberta in September, where he bagged a 5x5.

Thank you to Bob and Jackie Hope for hosting the Fall Party. A good time was had by all.

Mike Saffel returns to the Big Sky as superintendent at Meadowlark Country Club in Great Falls, Montana. He will be missed by Dr. Rieke and the rest of us turf managers in Michigan. Thanks, Mike, for your hard work and insight and we'll see you down the road.

A reminder - I am not the Secretary/Treasurer of the association. That position is now held by Bill Fountain. Please make all of your inquiries pertaining to association business to him. More often than occasionally, members call me with questions regarding the association and I just don't have the answers. My only responsiblity is the newsletter.

My analogy in regards to compliance with the new pesticide regulations is that complying is alot like filing your 1040 with the IRS. You had better do it correctly, because someday you may get audited. It may not be next week, next month or even next year, but eventually it could happen and you had better have filed correctly. In the same regard the Department of Agriculture may not be by next week, next month or next year, but when they do stop to inspect you have better been following the regulations.

If the Coffees during the summer months were held at taverns in the afternoon, instead of breakfast places in the morning, would they be called Beers?

The opening day of ice fishing is here and gone and back again. With any luck those of you who partake in this winter pasttime have iced a few by now.

Whatever happened to the word use. People love to replace use with utilize. Both words have the same meaning, only one word is three syllables and the other is one. Maybe in our profession, anyway, it is because utilized rhymes with fertilize. At an informative Michigan Turfgrass Conference, presentations by USGA representatives Bob Varek and Dr. Beards were the highlights. The information presented by Dr. Eric Nelson of Cornell on the effectiveness of compost on certain diseases was enlightening. When will the Turf Conference outgrow the Longs/Clarion/Holiday Inn Convention Center? Soon, if it already hasn't.

Enjoy these remaining weeks of winter and don't wish spring upon us too soon. By August, "Winter, hurry up!" will be the cry, so enjoy the ice and snow and hope that El Nino doesn't redevelop as predicted.

DATES TO REMEMBER

March 9, 10, 11..... Pesticide Training Seminar Railside Golf Course, Byron Center, MI (616) 878-9191 Hosst - Bill Fountain

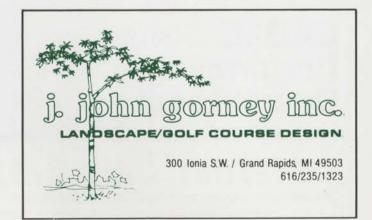
March 17 (Tuesday) Round Table Discussion Crystal Springs C.C., Kentwood, MI (616) 698-0822 Host - Harry Schuemann, CGCS

March 25 (Wednesday) G.A.M. Meeting Jackson Country Club, Jackson, MI (517) 787-0650 Host - William Madigan, CGCS

April 20 (Monday) Spring Meeting Grand Haven G.C., Grand Haven, MI (616) 842-3970 Host - Lou Krepp

May 11 (Monday) Joint Meeting/Mid-MI GCSA Timber Ridge Golf Course, Lansing, MI (517) 339-8000 Host - Steve Fiorillo

June ? Northern Michigan Golf Day



WESTERN NEWS

NEW BOARD MEMBERS

Gary Spahr, Superintendent at Ramshorn G.C. in Fremont and Pat Meersman, CGCS, Superintendent at Marywood G.C. in Battle Creek, are the new members of the West Michigan GCSAA Board of Directors.

Gary has been the superintendent at Ramshorn for three years. Previously he worked at Lincoln Golf Course in Grand Rapids and for Pete Ashe, CGCS at Hillsdale Country Club. Originally from Hillsdale, Gary enjoys bowling, boating, pheasant hunting as well as golf.

A second generation superintendent, Pat is in his second year at Marywood. Prior to working at Marywood, Pat was at Erskine Golf Course in South Bend, Indiana, for fourteen years. His brother, Mike, is the superintendent at Pine View Golf Course in Three Rivers. The Meersman's father, Jim, is now semi-retired and out of the turf business. He was the superintendent at South Bend Country Club from 1968 to 1980.

NEW SUMMER MEETING FORMAT

During the months of June, July and August there will not be formal meetings of the WMGCSA. Instead, *coffees* will be held at locations to be designated at a later date. These coffees will be informal and a chance for superintendents to meet and discuss problems they may be having (golf course only). The meetings will be held in each of the following areas: Lansing-Jackson, Kalamazoo-Battle Creek, and Grand Rapids in each month.

The reason for this concept is that during the busy summer months it is difficult to break away for an entire day to a golfing meeting. But it would be nice to meet with your grass growing colleagues to trade information. So the coffee concept was created and 1992 will be a trial year. If this does not work, coffees won't be back in 1993.

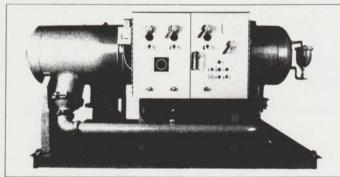
G.A.M. MEETING AT JACKSON COUNTRY CLUB

Members of the Western Michigan Golf Course Superintendents Association are urged to attend the Golf Association of Michigan meeting on Wednesday, March 25, at Jackson Country Club. And plan to bring your Green Chairman or Board Member, as the meeting will be very informative. Details on the content of the meeting will be available soon.

MICHIGAN STATE STUDENTS AWARDED WMGCSA SCHOLARSHIPS

Andrew Socie and Gary Johnson are the 1992 recipients of the WMGCSA Turf Scholarships. The awards

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were presented at the 62nd Michigan Turf Conference in Lansing. These turfgrass students were selected from 12 applicants, after interviews conducted by Harry Schuemann, CGCS, Bill Fountain and Paul Hoag.

Upon completion of the turf program in March, Socie will return to work for Mike Bay at Tam O'Shanter Country Club. Prior to enrolling at Michigan State Socie was a superintendent at Cueris Country Club in Clearfield, Pennsylvania. Gary Johnson worked for Jon Maddern at Elk Ridge this past year, and hopes to continue working in Michigan when finished with school. Johnson has worked at Bell River Golf Course and Salt River Golf Course.

MICHIGAN TURFGRASS CONFERENCE SETS ATTENDANCE RECORD

Interest in growing better grass is running at an all time high, as 1200 people attended the Michigan Turfgrass Conference held January 20-22 in Lansing, Michigan.

A SPECIAL THANK YOU TO THE CONTRIBUTORS TO THE FALL PARTY HORS D'OEUVRES TABLE

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GCSAA NEWS

LEGISLATIVE - Congressman Addresses Environmental Issues — Rep. Jim Slattery. (D-Kan.) said that Congress will have to pass legislation to help straighten out wetlands delineation problems. Slattery spoke before a conference called "Kansas Wetlands: Resource in Jeopardy," where representatives from the National Audubon Society and National Wildlife Federation expressed concerns that the proposed revisions to the wetlands delineation nual and House Bill 1330 would allow the destruction of valuable wetlands.

Even though Slattery is a co-sponsor of H.R. 1330, he says it contains provisions that are unacceptable. He told the conference attendees he "is confident that the bill has no chance of passing in its present form." Slattery noted his concerns about revisions to the delineation manual and said he would support efforts to have an independent scientific advisory committee examine the ramificantons of porposed changes.

In another environmental matter, Slattery stated that Congressional representatives have cautioned EPA Administrator William Reilly to enforce Congress' intent on the provisions of the Clean Air Act and not to give in to White House pressure. "We (Congress) know what we meant when we passed the Clean Air Act and I don't want anybody in the White House telling EPA what they think this piece of legislation means," Slattery said.

REGULATORY - EPA Unveils Pesticide In Groundwater

Strategy — The EPA has released its strategy for managing pesticides that pose a risk of contaminating the nation's groundwater resources. F. Henry Habicht II, EPA's deputy administrator said, "Current findings do not indicate a public health problem." The agency will focus on preventive measures to minimize threats to groundwater resources associated with pesticide use.

The new strategy is not a regulatory measure, but describes how EPA intends to regulate some pesticides in the future. If EPA determines that (1) a particular pesticide has or is likely to contaminate vulnerable groundwater as a result of normal use, and (2) labeling and other national-level restrictions are insufficient to protect groundwater, the agency may require individual State Management Plans as a condition of continued use of that pesticide.

State Management Plans are essentially an alternative to cancellation. Since risks to groundwater are the result of localized conditions, national cancellation y not be necessary if an EPA-approved management plan is followed.

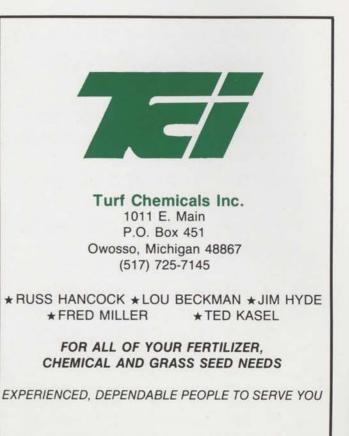
According to the strategy, State Management Plans would focus on vulnerable areas of the state and could choose from a wide variety of measures, including pesticide edcuation for users, modified pesticide application practices, use restrictions or prohibitions in specific places, and best management practices to reduce risks of groundwater contamination.

JUDICIAL - Environmental Penalty Upheld — An appeals court has upheld a 33-month jail term for a wastewater plant manager. The Fourth Circuit U.S. Court of Appeals ruled that the U.S. District Court acted properly and that sentencing guidelines wre not violated.

Mark Irby of Piedmont, SC, was convicted in November 1990 of six criminal violations of the Clean Water Act for dumping millions of gallons of partially treated sludge into a South Carolina waterway.

EPA Region IV Administrator Greer Tidwell said the ruling should serve as a warning to others who may be tempted to willfuully disregard environmental laws.

CREDIT: GCSAA's Briefing



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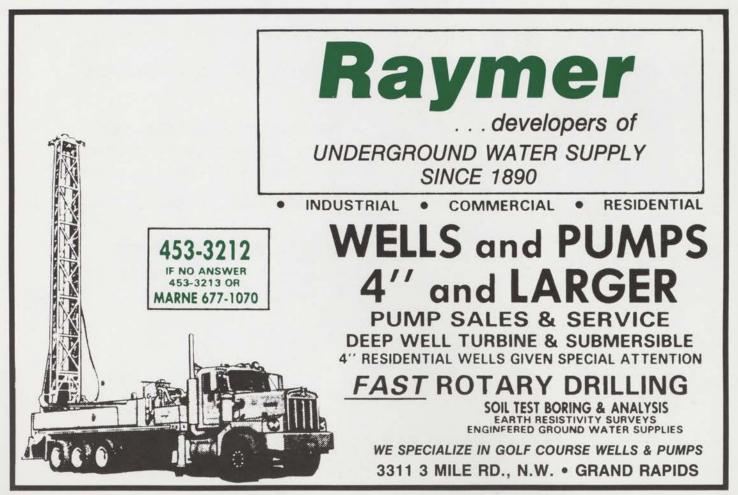
THE 1991 SEASON — AT LEAST IT WASN'T BORING

by James M. Latham, Director USGA Green Section, Great Lakes Region

The 1991 season has been a good news/bad news affair so far, with weather conditions determining the difference much of the time. Good news came to the West in the spring, with timely rains which have brought precipitation records up to par for the first time in 5 or 6 years, but they were preceded by winter desiccation damage to greens, tees AND fairways on many courses. Desiccation? How about 80 mph winds with still air temperatures at 20 degrees below zero!

Crown hydration/winter of *Poa annua*, which has plagued northern latitudes of Wisconsin to Montana the last two years, moved south to the Wisconsin-Illinois state line area and southward. Rather than general, across-theboard damage to all courses, it was a patchwork of turf loss. One course could be almost undamaged, while a neighbor was hurt severely. This provided an early season supply of grist for the mills of locker room agronomists. At the same time, though, it gave superintendents an opportunity to reintroduce bentgrass into weak spots and justify the formulation of pro-bent maintenance programs. For other areas, the worst was yet to come. Southern Michigan and Chicagoland went through a most disquieting season. It was an accelerated growing season, according to one Michigan superintendent. July weather came in May, August in June, and a breath of September in late July. Not a very deep breath, though, because another spell of hot, humid weather finished off a lot of *Poa annua* already weakened by disease and the hot, humid, but rainless weather earlier in the summer. Any time winterkill or Summer Patch become destructive is the time to present a plan for regeneration of bentgrass to The Powers so that a means of funding can be found. In this way, adversity might become a positive beginning to more reliable playing surfaces.

All of these woes were not shared democratically, however. Many courses have come through the hard times in fine condition. Those with a predominance of bent-grass and Kentucky bluegrass fared well. Naturally, *Poa annua* seedlings came on strong after winterkill, but the high temperatures in late spring applied some degree of stress.



Hopefully, the new Poa plants got a lot of competition by inter- or overseeding with more dependable species. In hot weather, the percentage of bentgrass or bluegrass seedling survival is low, but poa competition will not be as great as it is in either fall or spring. And what is wrong with aeration, slit-seeding, etc., weak or dead areas during the prime playing season? At least the golfers see something positive being done to their course rather than our usual moaning about that blankety-blank P.a.

Golf Courses in the Midwest

Have you noticed the number of golf championships being played in the MidLands these days? Medinah, Hazeltine, Oakland Hills, Crooked Stick, Cog Hill, Edinburgh USA, SentryWorld, Crystal Downs, Kemper Lakes, Interlachen, Otter Creek, Golden Valley, Indianwood, and other have become better known to competitive golfers of all ages in the last few years because of the USGA and PGA championships conducted in these environs in recent years. Architecture and style are, of course, the primary reasons for the associations to accept invitations to use these venues, but you can bet that course care comes next. The golf course superintendents at these courses, with backing by forward-looking Green Committees, have produced turf quality fit for champions as well as the non-handicapped.

The playing conditions at these courses did, at some time, favorably impress visiting golfers who communicate

with The Powers who make decisions on competition sites. Potential hosts may not even be aware of this. That's why *playing quality* of the turf is usually as important as cosmetic greenness. Probably more. Thatchy, overwatered fairways are underwhelming, regardless of the shade of green. P.J. Boatright believed that play to firm, fast, fair greens demands, firm, fast fairways.

The Courts

Litigation or legislation? When the U.S. Supreme Court ruled that communities could indeed promulgate rules exceeding those of USEPA, the door was opened for the political intimidation of governing bodies of all sizes. Timid politicians and highly vocal Anti groups can legislate away all pesticide use unless someone *locally* speaks up in their favor. This means that individual golf course superintendents, golfers, pros, club managers, as well as their organizations, will have to speak up.

We must talk to and inform our downhome folks in wards or precincts. Company lobbyists and pro-pesticide organizations cannot be of much help at community levels. If golf course managers *do* know more about pesticides than anyone in the neighborhood, they better begin speaking up. And *before* restrictions are proposed, not afterward, because the Anti's already have their ducks in a row. Remember that they know *how* to intimidate the polls, and scientific facts are of little concern. They deal in fear of the unknown and threaten law-givers with fear of be-

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NUGENT SAND CO., INC. P. O. Box 1209 Muskegon, MI 49443 (616) 755-1686 ing unseated. Golf courses in America are, or *should be*, prime examples of positive pesticide use, without distorting the population balance among 'harmless' bugs or beasts.

The Audubon Cooperative Sanctuary program has attracted a great deal of positive comment from both public and private golf operations in this initial year of operation. It is a first step in removing some of the unintended secrecy about golf course operations. This program does require an accountable performance of some projects, but if it didn't, it would mean nothing to anyone. It provides *living* proof that good golf course operations do not interfere with the natural scheme of things. It also provides a means of communicating with golfers and neighbors and politicians that golf courses exert a positive effect in their environment.

It will also be to the advantage of golf course superintendents to tell anyone, whether they are deeply interested or not, about the special environmental research being funded by the USGA. It is a Straight-Arrow evaluation of what happens to fertilizer and pesticides after they're applied and have done what they were supposed to do. They don't just disappear, so what *does* happen to them? The nationwide study is being conducted by outstanding researchers at a number of cooperating universities. Talk it up to show people that golf is a responsible member of a community.

Green Section Greens

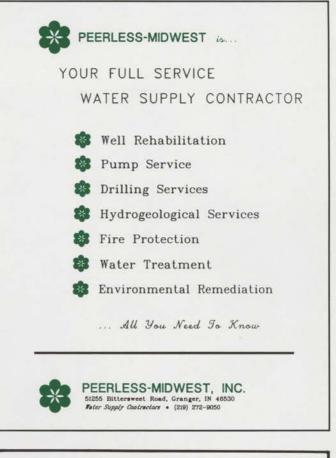
An inordinate amount of ink has been sloshed around this year about some imagined or contrived controversy about well-established procedures which have proven to be successful for over 30 years. CONTROVERSY! is a media cliche used to grab attention by creating doubt or fear, not unlike the words used by Anti groups. The Green Section is making use of Dr. Norm Hummel's expertise in soil laboratory technique to ensure that the physical tests on putting green mixtures are consistent with the procedures established early on and that their results are reproducible.

Anytime a single green building procedure is adopted on a national basis, some local problems arise. That leads to a lot of nickel and dime nit-picking by people who ought to know better, thus confusing the issue and distorting the purpose of this construction technique. Personalities, prejudices and pettiness get in the way of performance. And who suffers? The golf course superintendent trying to do the best for his organization, who has learned that hip pocket soil mixes are hazardous to his employment longevity but is being misled by egotists or corner-cutters riding on short-term performance.

Green Section greens are real and they perform according to the construction procedures used. Maintenance is easy when one learns their characteristics. They are easily overwatered because they accept water so easily. You might be surprised at the low water *requirement* when the perched water table is managed properly. And that, Virginia, is the reason we harp on having a sharp textural change just below the growing medium and feel that an intermediate sand layer is necessary between it and the gravel drainage bed below.

Green Speed

When the putts don't fall and approach shots don't hold, what's the matter? According to some competitors in the Senior Open at Oakland Hills, the greens became "crispy and faster" during the gorgeous weather they enjoyed during the Thursday-Sunday rounds. To answer that complaint, we measured the greens in the afternoon as well as in the morning. At 6:30 a.m. Stimpmeter readings were 10.5 feet and at 5:30 (or so) in the afternoon they were 9.5 feet, except near holes where the distance was 10.0 feet. So when your speed demons ask for more Stimp distance, ask them to play mid-morning, not late afternoon.





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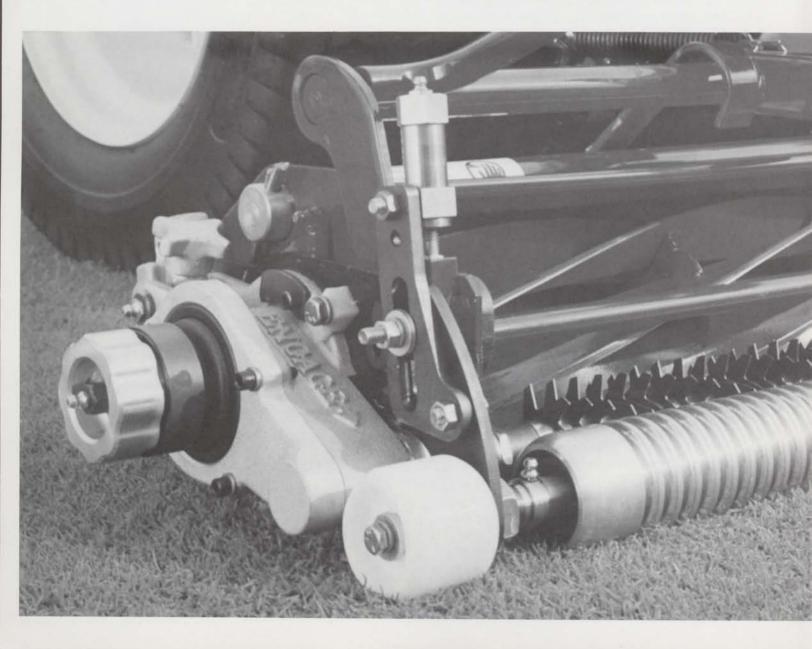
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HEIFERS TO DUFFERS: WHY FARMERS GOLF

by Justin Isherwood

EDITOR'S NOTE: Justin Isherwood is a farmer from potato country up in Plover, Wisconsin. That suggests the possibility of renaming the feature for this issue "From Up North." Mr. Isherwood writes his witty pieces for the Isthmus, a weekly newspaper in Madison, and the The Common 'Tater, a publication of Wisconsin's potato growers. This piece, most fully appreciated by those with a farm background, appeared in a July issue of the Isthmus.

For reasons of moral purity I do not golf. But I have friends, neighbors and kinsmen who do, many of whom are farmers, so I am curious about why farmers golf.

Golf started in a Scottish pasture, specifically a sheep pasture, where shepherds with not enough to occupy their minds took to whacking at stones with their walking sticks. This was a natural antidote to the awful boredom attendant to watching sheep, where either a shepherd gets involved with religion — as amply documented by history — or else commences to look at sheep in a romantic context. The Scots found neither prospect very commendable, and so we got golf.

As we know, all sports are therapeutic. Sport is the one viable alternative to murder, politics, agriculture, marriage, business, warfare and education. Golf is how civilization attempts to disarm otherwise nasty mental attitudes. Our Scottish predecessors understood this. Being prone to warfare themselves, the only thing between them and total annihiltion was emotional displacement — in other words, learning to beat up an innocent white ball.

That golf came to exist at the same time sheep agriculture went into decline is no mere accident. Sheep and golf require the same basic resource — short grass. This is because sheep can't eat except hunched over, and little balls get lost in tall grass.

Open space is also necessary because both sheep and golfers smell. Actually, golfers don't smell so bad, but open space is also the best habitat for swearing. Golf was designed by ancestral Scots so as to be a remedy for humanity's stifled verbal expression. Basebll evolved from stealing and chewing tobacco. Football followed the customs of beheading and bell-ringing. Basketball developed from the need to wear colored underwear and jump. Only golf singlemindedly attached itself to literary relief.

But why should farmers golf? Farmers have fields to swear in and tractor noise sufficient to disguise foul language, and thus far the Department of Natural Resources hasn't put limits on such discharge. What is lacking in agriculture is the behavioral violence golf allows and normal tractor operation does not. I did say normal tractor operation. Add to this one more innovation of golf — cheating. Ordinarily, the arithmetic involved in counting strokes ought not to present any difficulty to educated persons; surprisingly, it does. People who can otherwise tell the difference between one wife and two, 50 miles an hour and 70, two eggs or three, cannot understand the difference between four strokes and five. People who remember the name of the third cousin of their greatgrandfather twice removed cannot exactly recall whether it was six strokes at the third hole or three strokes at the sixth. Being frugal, as the Scots intended, they put down three.

But we're still not to the heart of it. What can those in agriculture gain from playing golf? A farmer who golfs will not threaten his best chance at a profit by surplus work. In other words, the more farmers golf, the less they are likely to overdo what the field has in mind. Golf is a better modifier of agricultural sin than drought, floods and hailstorms combined. Never mind the unsettling predictions of bovine growth hormone; so long as farmers are innoculated once or twice a week with a need to swing a stick at an innocent ball, prices will maintain themselves just fine.

Were I the Secretary of Agriculture I would not delve into set-asides, soil banks, wetland protection, buy-outs, feed grains, foreign markets or diversified production. Instead I'd provide every farmer and his apprentice with a set of golf clubs and limousine rides to a nearby golf course at least twice a week from April to November. Not only would the man's psychological health improve, but so, too, his economy. To ensure the results, I'd build a golf course in every township for farmers only, and if they didn't show up I'd shoot 'em for uncapitalistic activities and because they're too damn stupid for us to chance their procreating.

Having sworn off golf I now realize it's more effective than any government program, besides being a genuine inspiration to ritual violence and verbal expression. I intend to mend my ways now that I've seen the light.



MILORGANITE AS A DEER DETERRENT

by Terry Ward

Milorganite may enjoy success in a totally different application, in addition to being the premiere turf fertilizer. For many years, Milorganite has been used to discourage deer browsing by garden centers, landscapers and golf courses in New England where it is used as both a fertilizer and deer deterrent. Residents of many urban areas throughout the U.S. with growing numbers of deer can attest to the amount of damage browsing deer can do to shrubs and ornamental plants. Milorganite may offer some relief from deer damage and applied research has been initiated to qualify the product's effectiveness in an urban area where deer predation is a problem.

A study at Cornell University's Cooperative Extension Service, Dutchess County, New York, is attempting to quantify the result of using Milorganite as an effective deer deterrent. Thus far, the study indicates that not only is Milorganite an effective fertilizer, but it is deterring deer from browsing on valuable ornamental plants and shrubs. A major television new feature on deer damage in the study area was recently reported on ABC television's Nightly News.

For decades, Milwaukee, Wisconsin, has held the title of beer capitol of the world. As quiet as it has been kept, Milwaukee has also pioneered its way through the turf grass industry with Milorganite fertilizer. The city has produced the 100% natural organic fertilizer product, a coproduct of the city's waste water treatment process, since 1926 making Milorganite the real "grandfather" of all fertilizers in the turf industry.

The Cornell deer study shows Milorganite has deterred deer from browing on Hosta and Taxus yews when the

fertilizer is applied around the target shrubs' base. The rate of application is at five lbs. per 100 sq. ft. The Milorganite is broadcast on the soil surface around the target plant material. According to the study, Milorganite should be applied one to two times per month and after each snowfall in the winter months. Milorganite can offer consumers its fertilizer benefits while acting as an environmentally sensitive method of discouraging deer. The researchers feel that the scent of the product may be the reason the deer choose to browse elsewhere.

While the demonstration is still in the initial stages, the results strongly indicate that Milorganite can offer the consumer a premium natural organic fertilizer product as well as a quality, highly effective deer deterrent.

Les Hulkoop, Cooperative Extension Agent for Dutchess County who is captaining the study said, "The deer are definitely staying away from the Milorganite applications at this time. We feel that some of the commercially labeled treatments on the mrket do quite well in checking deer damage, but the plants grow out of the protection during spring and summer. Additionally, the users do not like the white film some of these treatments leave on the growing plant material."

Many of the deer repellant treatments lose their effectiveness in winter after temperatures fall below 10 degrees F. The study will also assess predation control if Milorganite is hung in bags from the target plants throughout the winter.

The study is to continue and data will be collected for an additional year.

ORGANIC FOODS BUG ME

Come on, admit it. You know as well as I do that organically produced fruits and vegetables are often nauseatingly scrawny and ugly. They look like escapees from a leper colony. They've got soft spots, brown spots, pockmarks, and extraterrestrial deformities. I ask you: Have you ever seen anything as hideous as an organic "green" (I use the term loosely) bell pepper?

Last week I accidentally wandered into the produce section of one of those supermarkets that advertises an exclusively organic line of vegetables. In my haste, I momentarily abandoned by principles and bought a cauliflower. It didn't look too bad. As soon as I got it home, I cut the yucky parts off and tore it into small pieces, washing it thoroughly. Then I nuked it in the microwave for a few minutes and set it on the table.

That's when the revelation happened - a regular

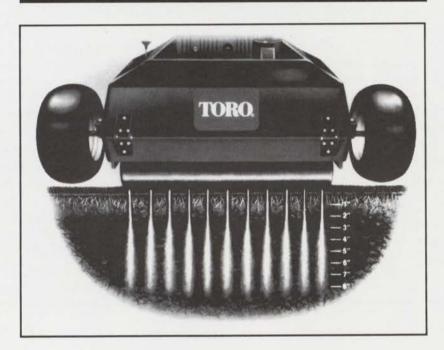
epiphany. No shining white light or anything. Just bugs. Tensy weensy little creeps forced by the heat out of their cozy little bungalows somewhere in the recesses of the cauliflower.

Now, I'm a big boy. One or two little bugs aren't going to send me running for cover. But picking 30 or so baked insects out of my dinner and piling them on the side of my plate will put me off my feed every time, and I don't care how much protein they've got.

I considered the possibility that I may have committed an eco-crime by microwving the natural habitat of this species, or that the supermarket had violated their sacred covenant with the earth by selling me a fellow creature's apartment complex to cook and eat. Fortunately, we're both fairly safe from prosecution for the time being — the



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animal rights crowd hasn't placed a high priority on protecting insects. Yet.

Call me crazy, but I'm one of those old-fashioned types who think we have a right to eat food without uninvited guests inside it. There are, of course, some earnest folks who will protect that it's "natural" to have a veritable insect circus crammed into our fruits and vegetables. To them, I say: Phooey. As nutritionist Covert Bailey points out, lots of things are "natural" — syphillis, for one.

I know people who hate the looks and taste of organic foods, but eat them anyway because it makes them feel virtuous to sacrifice their pleasure for the sake of the environment and better personal health. They don't want to load up their bodies with earth-destroying, cancer-causing pesticides. Unfortunately, that thesis is contradicted by the facts.

To begin with, pesticides are absolutely inescapable. There are two kinds of pesticides — those produced by humans in laboratories, and the "natural" pesticides produced by the plants themselves. Plants are literally stuffed with chemicals. No plant could survive without the ability to fight off predators. If you eat food, you're consuming pesticide residue.

But isn't it better to eat natural pesticides? After all, if they're natural, they're harmless, right? Wrong! Look, I know I'm laboring what should be an obvious point, but let's get this clear: all pesticides — natural or not — are poison. They're harmful to living things. That's why they work. They have one purpose for existence, and that is to kill bugs. And, taken in sufficient quantities, they can kill people, too.

In fact — and here we approach the nub or gist of what I'm trying to say — natural chemicals can be more dangerous than synthetic pesticides. About half of all natural pesticides are potentially cancer-causing. I'm talking about real, live poisons produced by apples, broccoli, potatoes, tomtoes, carrots, pumpkins, pepper, celery, cranberries, onions, radishes and mushrooms.

Dr. Elizabeth Whelan, president of the American Council on Science and Health writes in a recent issue in *Imprimis*, "One mushroom has an estimated cancer hazard 167 times greater than the daily dietary intake of the chemicals PCB and EDB." (You can get a copy by writing to Hillsdale College, Hillsdale, MI 49242.)

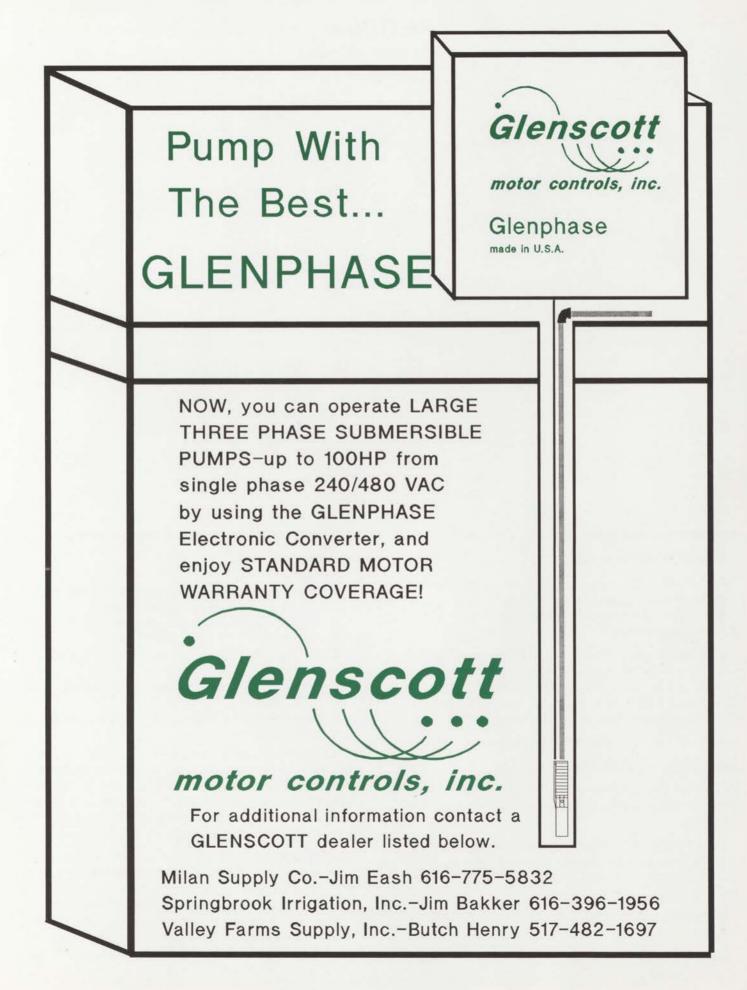
You know those stressed-out looking vegetables in the organic stores? Well, they are stressed-out. They've been under attack, without the manmade chemical defenses that protect them more efficiently than they can protect themselves. And when plants get stressed, they start pumping out higher levels of their own pesticides.

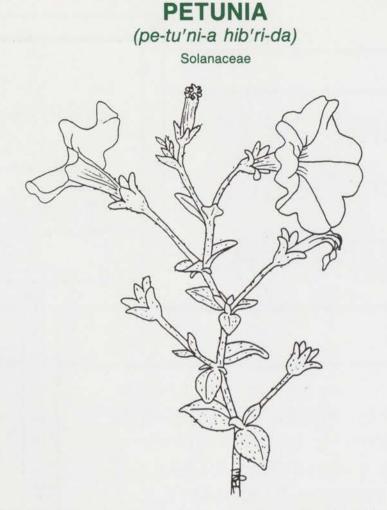
The result is that when you eat organic foods, you're actually ingesting more harmful chemcials than if you'd eaten foods with man-made pesticides on them.

If this is true, then why all the fuss about organic versus sythetic chemicals? That's because of a fundamental, usually unquestioned environmentalist assumption: what's ''natural'' is best, and anything man-made is bad.

That's not science, it's religion — a religion that is more than a mere "opiate of the people." It's poison.

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SCIENTIFIC NAME/FAMILY: Petunia x hybrida

COMMON NAME: Petunia

LEAVES: Alternate, sometimes opposite on upper leaves, broad-ovate to cordate shaped, 11/2" to 3" long, simple, entire margin, surfaces of leaves and stems covered with a viscid-pubescence.

FLOWER: Flower 2" to 4" long; has funnel-shaped corolla tube with a very broad limb. Various cvs. have flowers varying in size, form, and color, often deeply fringed or fully double. Many colors available from white to deep purple with various striped or starlike markings.

HABIT: 8" to 15", round or trailing habit.

SEASON OF BLOOM: All Summer

CULTURE: Sun to partial shade; light, well-drained soils. Petunias will grow in heavy shade, but they will not bloom satisfactorily.

UTILIZATION: Grandiflora and multiflora singles are used in beds and borders; doubles are used in flower boxes, containers. Doubles have a tendency to lodge in the garden.

PROPOGATION: Seeds germinate in one week at 72-75 °F.

DISEASES AND INSECTS: Botrytis, tobacco mosaic, stem rot, aphids, and flea beetle. Tobacco mosaic, which

is transmitted by aphids, is the principle problem.

CULTIVARS:

- 4 categories
- 1. Single grandiflora huge blossoms sometimes 5" across with ruffled or fringed petals.
- Single multiflora great number of 2" to 3" blossoms.
- 3. Double grandiflora fewer but large double blossoms.
- 4. Double multiflora great number of doubles about 2" across.
- 5. Cascade types longer stems, adapted to hanging baskets.

The type of petunias is quite varied and the list of cultivars seems to be endless. It is difficult to list some without leaving out some very good forms. Furthermore, the list is added to yearly. The best way to keep abreast of petunia cultivars is to visit gardens, garden centers and read current articles and seed catalogs.

ADDITIONAL NOTES: No other bedding plant even approaches the petunia for universal dependability, garden value, and long season of bloom. Add to this the diversity of color, flower forms and growth habits and you have the answer to why it stays atop the popularity list. Petunia is derived from *Petun*, a colloquial name for tobacco, to which petunia is related. Native to South America. Annual.

AUDUBON PROGRAM RECOGNIZES COURSE

The Honors Course in Ooletwah, TN has been chosen as the first golf course to be recognized for its conservation and preservation efforts under the Audubon Cooperative Sanctuary Program.

Superintendent David Stone, an avid naturalist, has instituted several programs to help identify, monitor and encourage a variety of wildlife species at The Honors Course.

Stone and Rod Dodson, executive director of the Audubon Society of New York, will serve as instructors for a new seminar scheduled Feb. 12, at the International Golf Course Conference and Show in New Orleans. "Wildlife Management and Habitat Conservation" will offer information on ways superintendents can identify and encourage wildlife habitation at their courses.

The Honors Course, which hosted the 1991 U.S. Amateur Championship, was constructed in harmony with the existing site topography, thereby minimizing the negative impact of excessive soil disturbance. Naturalized tall grasses are encouraged to grow in areas between greens, tees and landing areas, while native shrubs and tall grasses border the roughs, streams and pond shorelines. Nest boxes for birds are located throughout the course.

As of early September more than 175 golf courses had registered to participate in the Audubon Cooperative Sanctuary Program. The program is sponsored by the USGA and administered by the Audubon Society of New York State.

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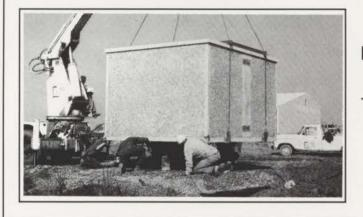
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