

WHOSE RESPONSIBILITY IS IT, ANYWAY?

The 58th International Golf Course Conference and Show is scheduled for January 26 through February 2, 1987. This annual event, sponsored by the Golf Course Superintendents Association of America, continues to be the "educational-professional" high point of the year. Over 12,000 attendees will gather in Phoenix for a week long forum designed to disseminate the "latest in golf course management know-how" to that segment of the golf course industry primarily responsible for the "bottom-line" in golf - the outstanding playing conditions now realized by today's golfing population. Quite simply, those excellent conditions are not possible without educational opportunities such as GCSAA's Conference and Show.

These opportunities are offered in several different settings during the Conference and Show and will include:

- a) a full schedule of seminars dealing with topics ranging from "Basic Turfgrass Botany and Physiology" to "Managerial Productivity". From "Budgeting and Forecasting" to "Disease Identification and Control". A total of twenty-nine such seminars, in one and two day sessions, designed to provide participants with a concise, intense opportunity to deal with the specific topic.
- b) a full day of "concurrent educational sessions" that will address eight different general themes but will be manifest in over 70 specific topics. For example, the "New Products and Technology" session will see speakers deal with "New Turf Growth Regulators", "Use of Aerial Photography", "The Future of Mowing Equipment" and so on.

The "Fairways: Changes and Practices" session will deal with "Improvements in Bentgrass from Triplex Mowing", "Selling Brown is Beautiful" and "Ultra-Deep Aerification for Fairways" among others. And the list goes on for over 60 hours during this portion of the program,

- c) a "trade show" that will include the latest in product development available to the golf course industry. Over 300 exhibitors will be on hand to discuss the "pros and cons" of various pieces of equipment and supplies and services. This is a unique opportunity that allows for a great deal of information exchange about the "tools" of our profession,
- d) a complete schedule of educational opportunities presented by allied associations such as the American Society of Golf Course Architects, the National Golf Foundation and the Sports Turf Managers Association. Their topics are readily adaptable and appropriately applicable to our industry,
- e) the perpetually excellent "USGA Green Section Program" which has adopted the 1987 theme, "One Business In Which Success Is Not Always Found At The Bottom Line". This year's USGA Session is highlighted by Wisconsin's own Monroe S. Miller and James M. Latham.

Again, a full schedule of formal offerings will be afforded all attendees and those offerings alone are worth the price of admission. However, and further, possibly the greatest opportunities lie in the environment in which these sessions take place. That is; a gathering of professional peers who are pursuing, basically, the same goal - excellence in golf course management.

In my opinion, some of the very best ideas are formulated, some of the very best information is exchanged, some of the most valuable contacts are made and some of the most lasting friendships are enhanced in that environment that is the International Golf Course Conference and Show. The discussions in the halls during breaks from the conference schedule, the conversations on the trade show floor, the "give and take" over dinner at the end of the day's activities; those are some real "educational opportunities" and, when combined with seminars, the concurrent sessions, the trade show. the allied associations and the USGA session, it is, bluntly, very hard to come up with a good reason not to attend.

The International Golf Course Conference and Show is a business opportunity that comes along once a year. The International Golf Course Conference and Show is a small investment that will pay big returns for you and your club. Attendance at the International Conference and Show is a mutual responsibility shared by the Golf Course Superintendent, in terms of time and professional interest and growth, and by the club or facility, in terms of support for such attendance This mutual responsibility must be recognized if the goal of excellence in golf course management is to be realized. Anything less is hard to understand.

BRAYTON MEETING SET

Joe Wollner from Brayton Chemicals, Inc. has set February 12, 1987 as the date for Brayton's 4th Annual Greatest Show on Turf. The guest speaker will be Dr. Robert Shearman from the University of Nebraska at Omaha.

The major manufacturer representatives will also be on hand to answer any questions about their product lines for the coming season.

More information will be in your mailbox in the near future.



RESPONSE TO "CAVEAT EMPTOR"

By Ed Devinger

The recent editorial in the November/December 1986 issue of the *Grass Roots* really hit a nerve.

I cannot, nor will I try to, justify the one example mentioned in the article. I believe that it is necessary to look at the entire picture and compare.

It is necessary, today more than ever, to compare what <u>value</u> you are getting for the dollar spent. While certain local sources may stock and sell a few chosen parts that can be used on a certain piece of equipment, why do they have them? Because they are commonly used on many other items, not because he wants your business.

Most of the OEM firms in our business stock <u>all</u> parts for <u>all</u> the equipment they sell. This can be 25,000 or more individual parts. They want, need, and deserve your loyalty when buying parts. They provide many other "services", either directly or through the distributor networks. Warranty, factory training, trade show exhibits, literature, door prizes, hospitality, parts and service manuals and recommendations, R&D, etc. It is difficult to place a value on these items, but there is a value!

I recently purchased one 9 volt Duracell battery at a "convenience store" (i.e. 7-11 or White Hen). The price was \$3.67 plus tax. That evening I noticed an ad that Target was selling the same Duracell battery for \$1.39. Why, I asked myself, the huge difference? I DON'T KNOW!! But it was my choice.

There is nothing in the world that is made that someone will not be able to sell for less. When selling for less there are usually two reasons: 1) Lower quality; 2) Lack of support services.

A dozen ears of corn is cheaper when buying it direct from the roadside stand than from the grocery. The grocery has more overhead expenses, lights, help, heat, rent, insurance, etc.

Every OEM is concerned about this problem. They are also equally concerned about profitability. It would be

factual to say that the "local supplier" (i.e. "bearing house") may buy 10 times or maybe hundreds of times more bearings than a particular OEM. For that reason his cost would be significantly lower!!

One possible solution is that common, readily available parts would not be made available from the OEM. The OEM would suggest that those certain parts be obtained from "local sources". Not everyone has the luxury of having a local source. The advantage as it ap-

pears would be lower pricing. The disadvantage would be finding a source for the parts. It may be necessary to go to many places to obtain the parts (i.e. belts, filters, hydraulic hoses, bearings, etc).

And how about the ultra-critical time when you need that certain part and cannot find it "locally". Because the distributors' records show little or no sale of that part, it isn't stocked any longer. Or because the parts list instructs the customer to obtain it "locally" the OEM does not stock the part either. Now what?

Please keep in mind that the OEM and the "local distribution network" need and deserve your loyal support. When necessary, discuss your genuine concerns with them. In the end, the decision is yours, but weigh all of the factors that need to be considered.

Gelhar Sand

Serving Golf Courses Since 1919

Silica Sand-Washed, Screened and Blended to U.S.G.A. specifications. Top dressing and Bunker Sand.

Chemical analysis of Washed Silica

Silica	99.941%
Iron Oxide	.018%
Aluminum Oxide	.012%
Calcium	.004%
Magnesium	.003%
Sodium	.001%
Potassium	.001%
Titanium	.001%

Silica Sand Top Dressing Screen Analysis

Mesh	% Retained
30	2.0
40	11.0
50	25.0
70	51.8
100	10.0
140	.2



P. O. Box 78 ● Larsen, WI 54947 414-667-4792



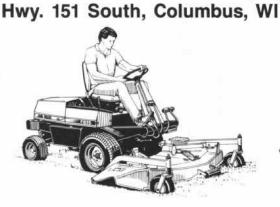
TURF EQUIPMENT





MID-STATE TURF EQUIPMENT Wisconsin's John Deere Golf & Turf Equipment Distributor







QUALITY IS ON COURSE WITH JOHN DEERE **GOLF & TURF CARE MACHINES GREENSMOWERS • HYDRAULIC GANG MOWERS • AERIFIERS** TURFMOWERS • UTILITY VEHICLES • BOOM MOWERS FRONT MOWERS • TRACTORS

Sales

JOE DESCHLER (414) 398-3212 (Home) JIM KIRKPATRICK (414) 623-4020

623-3700

COLUMBUS, WI **SALES • SERVICE • LEASING**







A Weighty Matter

By Monroe S. Miller

Too many people in our country won't touch the topic of English/metric system measurement with a 3.048 meter pole. Good reason, probably. We've been waffling back and forth since President Ford signed into law the Metric Conversion Act nearly a dozen years ago. At that time it was generally believed, even accepted, that by now the United States would be essentially metric and be on the same wavelength as the majority of the other countries of the world when it comes to measurements.

Not by a country mile. Or should I say, not by 1.6 country kilometers? The problem with the Metric Act is that it didn't make conversion mandatory. It gave no exact timetable for the changeover to the metric system. And there wasn't a popular groundswell to force change. American adults in 1975 were generally uninformed about the metric system and had little interest in learning. A 1979 Gallup Poll revealed that only 13 percent of those asked knew that 39.4 inches equal a meter. And only 1 percent knew a gallon contains 3.8 liters and 62.1 miles is equivalent to 100 kilometers. So slow has been the progress that the U.S. Metric Board, which was created by the 1975 legislation and filled in 1977, was phased out by the administration in 1982!

Today, metric system supporters think America will be generally metric by the year 2000 - a great compromise with original hopes and expectations. It could be a tough 15 years, though. I've a relatively new GM car that has both metric and English fasteners, an aggravating situation when trying to make repairs. In an effort to move ahead of the game they took a giant step backward. A manufacturer should have one or the other system, but most certainly not both. I cannot fathom another decade and a half of such confusion.

The Canadians have not helped our situation, either. In early 1985, the public forced the government to retreat from its efforts to require a metric system. Parliament had established

rules and laws punishing merchants who kept using the old system of English weights and measures. What makes their situation at least as insane as ours is that only the metric system is taught in schoolrooms! Kids know liters and meters but do not know the weight of a two-ton truck. Yet they do appreciate the vardstick - Canadian football fields are marked in yards. They are as confused as we are. The Canadian government favors the metric system but has bowed to the public belief that compulsory metric use is heavy-handed and insensitive. My guess is that Americans would probably react in a similar way. We hate having Uncle Sam push us around and force things down our collective throats "for our own good".

Frankly, I am a staunch proponent of the metric system. I'd have to be - I studied under Jim Love too long to bear up under his strong feelings favoring the logic of the metric system. He always has been an ardent exponent simply because a chemist, whether he's dealing with soil chemistry or organic chemistry, deals almost exclusively with the metric system. I am convinced that the opposition to change isn't because the metric measures are difficult, but rather because of potential costs involved.

In reality, the biggest hurdle to change is merely our way of thinking. It's a little like learning a foreign language. I studied Spanish for two years and it was only near the end of that time that I was finally learning to think in Spanish. Prior to that everything was translated from Spanish to English, a response formulated in English and then translated back into Spanish. Similarly, novices to the metric system read a weight in kilograms and translate to English units to understand the weight. The secret is to become acclimated to using the metric system in the whole process. Think

Conversion should be an easy sell - it's an easy system that is no different to work with than our currency system. Like the dollar, metrics are based on

units of ten. Once committed, I predict the country would get the hang of it quickly because of familiarity with the dollar. It really is not difficult to think in terms of 100 centimeters to a meter or 1000 grams in a kilogram. An obvious advantage is its adaptability to quick arithmetic using powers of ten. One kilogram becomes 10³ grams. Look at how easy comparisons become - a quart of water is about 10⁰ kilograms, the earth weighs (has a mass of) 10²⁵ kilograms, and a mosquito weighs 10⁻²⁵ kilograms. Use of powers of tens eliminates a lot of "zero" writing!

Given an objective moment of consideration, our current English system seems very complicated. It is reminiscent of the old British currency system before they converted to decimals. There were 20 shillings to a pound, 12 pence to a shilling, 21 shillings to a guinea. We have 12 inches to the foot. three feet to a yard and 1,760 yards to the mile. On golf courses (and elsewhere) we divide inches by 1/64's but then end up frequently expressing it in thousandths (1/64" = 0.0156'')!Weights are just ridiculous. In the avoirdupois system (we also have troy and apothecaries!) there are values for the grain, dram, ounce, pound and ton (both long and short). It is exponentially (pun!) easier to work with a standard gram weight which can be divided into milligrams or multiplied into kilograms.

Take a pragmatic and practical example. We almost always discuss pesticide applications in terms of ounces per 1000 square feet. It is actually easier to work out proportions for a particular application. If recommendations require "x" grams per liter (it is convenient that a liter of water is one kilogram) to cover a square meter, or "x" square meters, then all you need is a percent formula and the calculations from there on don't even require your solar powered calculator or a computer!

It may well be that golfers will be harder to convert than golf course managers. Since a yard is 0.914 meters, big hitters may have bruised egos when they realize that their 250 yard drive is now a meager 228.5 meter drive. And they may worry that it is more difficult landing on a 27 meter wide fairway than it was on one that was 90 feet wide. Our 150 yard markers will become 137 meter markers. What

Continued on page 6.

Continued from page 5.

is important for golfers is that they will use the same club for a particular shot they always have. It will merely be a bit confusing for a while.

Although I fancy myself a champion of the metric system, it is undeniable I will miss the old English system, when the inevitable switch happens. The current system is steeped in history and tradition. The inch was originally defined in Anglo-Saxon antiquity as the "length of three round barleycorns end to end". The meter, on the other hand, is defined in terms of the wavelength of the orange-red light emitted by the atoms of the krypton 86

isotope - equal "to 1,650,763.73 wavelengths in a vaccum". It's a giant leap from barleycorns to krypton 86 isotopes, but a leap we must make. And what will happen to all of our beloved phrases and expressions that rely on inches, feet, miles, quarts and pecks? What will happen to the inchworm? Will a pint still be a pound the world 'round? Is "give him an inch and he'll take a mile" still true? Will I still. all too often, be "in a peck of trouble"? Denver will go from the "mile high city" to the "1.4 kilometer high city"! I fear an ounce of prevention will no longer be worth a pound of cure. The 26 miles across the sea to Santa

Catalina are now 40 kilometers.

I'm willing to risk losing some of the tradition of our old system to gain the simplicity of metrics. The simplicity will not lead, as some are afraid, to monotony. Although conformity has never been the rule in our country, let's make the concession to the rest of the world on this issue.

I have some advice for our government that paradoxically comes from the English play "My Fair Lady". My hope is that it will help move them to definitive action on metric conversion. As Eliza Doolittle bawled to the horses at Ascot: "Git orf yer bloomin arse!"

Outgrow your *Poa annua* problems with ProTurf

Now, with Scotts new TGR_™ technology, you can reduce your course's *Poa* population, while encouraging more desirable grasses. You'll see a gradual, more natural transition to greener, denser turf without a sudden decrease in playing surface quality.

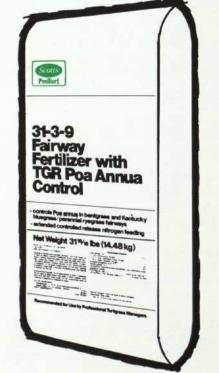
Ask your Tech Rep for full details.



ProTurf Division
O.M. Scott & Sons

Dick Evenson
Senior Technical Representative

443 Woodview Drive — Sun Prairie, WI 53590 Telephone: 608/837-6563

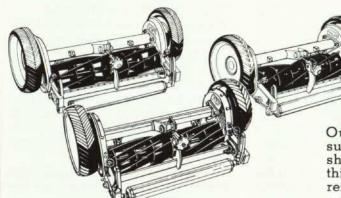


Reindert TURF E



TURF EQUIPMENT

IRRIGATION SUPPLIES



Single Point Adjustment

OUR GANG

Our Reelmaster® 5, 7, and 11 blade gang mowers deliver a superb quality cut and finished look. Whether you need a short, super-formal cut. Or a longer informal cut. Or something in-between. Yet all three also deliver

thing in-between. Yet all three also deliver renowned Toro durability to keep you cutting. For more information, contact the Toro distributor listed below.

TORO

THE PROFESSIONALS THAT KEEP YOU CUTTING

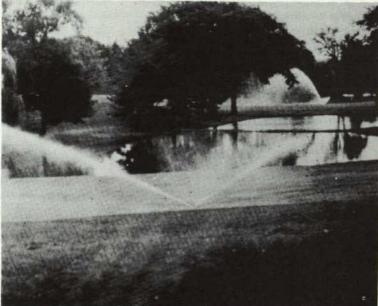
THE

PROBLEM SOLVERS

TORO

SPRINKLER SYSTEMS

- **◆FULL LINE STOCKING DISTRIBUTOR**
 - REPAIR & SERVICE CONSULTATION
 - DESIGN & SPECIFICATION
 - PUMPS & CONTROLS
 - PLASTIC PIPE



Reinders TURF EQUIPMENT IRRIGATION SUPPLY

13400 WATERTOWN PLANK RD., ELM GROVE, WIS 53122

PHONES: LOCAL 414 786-3301 WIS 1 800 782-3300



Don't Go Near Our Water

By Monroe S. Miller

I'll never forget two bumper stickers I saw while attending the GCSSA Conference in San Antonio, Texas in 1978. That was a time when the energy crisis was occupying our minds, especially the minds of those of us living and working in the north. The grim message of those bumper stickers read: "Let the bastards freeze to death in the dark" and "Drive 95 and freeze a Yankee". There was no comfort in those words and they put on display the attitude of some in the energy rich southwest and west. We are, in short, terribly vulnerable when it comes to energy resources.

But now the shoe is on the other foot. What we lack in the northcentral, central and northeast states in terms of energy resources (oil, gas and coal) we may nearly make up for in water. Water just might, in the years to come, be our greatest asset. And when speaking of water, it goes without saying that we must speak of Great Lakes water.

The Great Lakes are at risk because of the prospect of bone-dry irrigation ditches and parched Sun Belt golf courses. Although not yet at the crisis stage, the Ogallala aquifer under the High Plains states has dropped 10 to 200 feet and is going down more each year. When the Central Arizona Project, which diverts water from the Colorado River, reaches its final destination in Tuscon, it will supply only 2/3 of the water needed in its service area by the year 2000. By the way, this little water project cost \$3.5 billion of your tax dollars. In the lower Colorado River Basin and in some areas in the southern plains, groundwater withdrawals exceed recharge, resulting in permanent lowering of the water table. This doesn't strike me as being very intelligent water policy. And the cost of water to users in these areas is finally starting to rise, which they do not like any more than we liked the cost of their oil ten or so years ago. Obviously, the pressure for even more water is building. And they are looking in our direction.

You could call theories being put forth the Great Lakes Water Bail-out. The thirsty states look north and see 95% of the fresh surface water in America. "The technology to move water from those lakes through pipelines or canals exists, so why not quench our thirst with their water?", the theory goes. In 1985, a California congressman proposed (unsuccessfully) that federal agencies be authorized to start Great Lakes Diversion in the national interest. The GRAND Canal Concept, which would turn James Bay into a fresh water impoundment and distribute water through the Great Lakes system to the arid states for the meager sum of \$79 billion of the taxpayers' money, enjoys support in the dry regions. There will be more and more outrageous proposals like these that we'll have to ward off in the near future.

Why be so concerned, since the Great Lakes have so much water? Here are a few economic facts about the Great Lakes and how important they are to Wisconsin and other bordering states:

- (1) One-fifth of the manufacturing in the U.S. is located along the Great Lakes shores. They are there because of the need for large quantities of clean water. Specific to Wisconsin is the fact that for thirty years we have been the number one paper making state. That standing would not have been possible nor will it be without an adequate supply of water.
- (2) There were 23.7 billion killowatt hours of hydro-electric power generated in 1983 by water flowing through the Great Lakes. Additionally, utilities with plants along the lakes use the lake water in steam condensors and for boiler water. The lakes are also used to transport coal to electricity generating plants.
- (3) There are 26 million people living in the Great Lakes Region who rely on the lakes for their drinking water.

- (4) In 1983, 78.6 million tons of commercial cargo were shipped through Sault Ste. Marie, Michigan. The St. Lawrence Seaway had 49.7 million tons of cargo go through its locks the same year.
- (5) Water-based recreation and tourism, both big business in Wisconsin, generate between \$8 billion and \$12 billion in the Great Lakes Region.
- (6) There are 98 state parks and 12 national parks on the Great Lakes shores. Canada has another 39 provincial parks.
- (7) The Great Lakes are the source of fish caught and sold by commercial fishermen in the area.

These facts illustrate pretty clearly how important the Great Lakes are to us, our economy and our lifestyles. In the future, water in general and the Great Lakes in particular will be even more important in our region. They are a tremendous asset that can help lead us back economically and play a critical part in future growth. We must protect them.

They do contain enormous amounts of water. But remember this: only one percent (1%) is renewable. Consume or divert more than that small fraction and the level of the lakes will be lowered forever. That is unacceptable. The University of Wisconsin-Madison Sea Grant Institute did some modelling to see the impact diversion would have on a couple of industries - shipping and hydropower. Lowering the level of the Great Lakes would reduce the size of ships that can use its harbors. Loads of cargo would have to be smaller, and more ships put to use. The result would be the loss of competitiveness. Diversion would lower flow of water in the lakes and reduce the amount of electricity generated by hydropower plants. This power would have to be replaced through purchases of energy on the open market - a direct economic cost. This hydropower is energy lost to an area that has few energy resources. The whole scenario doesn't make any sense. The Sea Grant Institute estimated that losses to just these two industries would be in the hundreds of millions a year. And Golf Course Superintendents in Wisconsin and bordering states can tell you of years of drought, when those Great Lakes may be very important to us in very personal ways.

Any decline in the economy of the GLR directly impacts on golf courses. Fewer people, less golf. Less prosperous society, less prosperous golf courses. We need the tourism of the lakes to help support our daily fee golf courses. DIVERSION OF GREAT LAKES WATER WOULD BE DETRIMENTAL TO THE WISCONSIN GOLF COURSE INDUSTRY. We must recognize this and assume proper leadership roles in protecting the lakes.

What are some solutions? The first could easily be a sensible federal water policy. You will not believe this: Albuquerque was paying 59¢ per 1000 gallons of water and Dallas was paving 80¢ per 1000 gallons of water at the same time Milwaukee was paving \$1.40 per 1000 gallons of water that was drawn directly from Lake Michigan! This is total insanity and obviously has to end. If we eliminate these mammoth federal subsidies for cheap water. the growth of dry areas will be determined by economics. Here are some more figures of equal illogic: studies of western irrigation projects show that users of water paid only 27¢ to \$9.32 per acre-foot of water that cost the government between \$54 and \$130 to deliver! And the water is used to produce agricultural crops that have enormous surpluses! This is ridiculous. A federal water policy would require users - domestic, industrial, agricultural and yes, even golf courses, to pay what the water cost to supply. This is a first major step.

It seems to me that strong support

for the USGA research program working to develop more drought tolerant grasses deserves widespread and more generous support, especially from regions desperate for water. I looked at the list of individuals, clubs and associations donating to the program last year. It is an unimpressive list, considering the potential seriousness of the problem. It also seems logical to continue development of the use of effluent water for golf course irrigation - I've not read a whole lot about it lately. Maybe that idea needs to be moved to the forefront again.

More serious water conservation programs could be developed and implemented; there is currently widespread wasteful and unnecessary irrigation. I think a persuasive argument could be made for increasing the efficiency of irrigation equipment. The technology may or may not exist, but when the price is right the equipment will be on the market. And we might have to accept some new and radical changes in golf course design in arid regions. Golf course management expectations may have to change; like it or not, it just may not be possible to irrigate a 150 acre 18 hole golf course in the arid region from fence line to fence line, unless players are willing to pay for it. And let's face it: limited water availability may dictate land use, land development and new construction.

I would also ask those looking our way for a solution to their water prob-

lem to realize that the solution should not, must not and will not come at our expense. I would expect the few suggestions I thought of (and there are scores of others, I'm sure, from those vastly smarter than I) to appeal to the conservationist in all of us. Further, preserving and protecting the Great Lakes and the welfare of the region should speak to the conscience in all of us. There are other answers to the water shortages in the south and west.

There is a broader, more general point to be made in this discussion. One who studies New England like I do can find wisdom from any one of her many and famous philosophers. Henry David Thoreau, the sage of Concord, Massachusetts, once observed that "This curious world which we inhabit is more wonderful than it is convenient: more beautiful than useful: it is more to be admired and enjoyed than used." E.B. White remarked some thirty years ago. "If Thoreau were here today he would see that 10,000 engineers are busy making sure that the world shall be convenient even if it is destroyed in the process, and others are determined to increase its usefulness even though its beauty is lost somewhere along the way."

Both of these men could have been talking of our Great Lakes. The Lakes are worth whatever efforts are required to save and preserve them, for our children and for their children. It is the right thing to do.

WAUPACA INDUSTRIAL SAND COMPANY

715-258-8566 Wisconsin's Quality Silica Sand Company

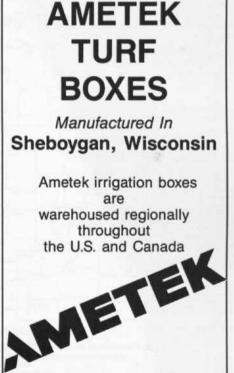


Shipping To All Golf Courses In the Midwest

Topdressing • Bunker Construction Mixes Sand • Peat • Topsoil

Call us and find our why quality conscious golf courses prefer doing business with us.







With over 165 different varieties of grass seeds to choose from, selecting the "right" grass seed can be a nightmare. A bad choice can turn into a big monster.

At Kellogg, seeding is a science, not an experiment. Every blend of turfgrass seeds we sell is tested. And retested.
Our recommendations to you are based on proven results and years of experience. Before a monster gets loose in your lawns, call Kellogg at:

1-800-792-3504 ext. 492



Kellogg Inc. Seeds & Supplies 322 East Florida Street Milwaukee, Wisconsin 53204 (414) 276-0373 In Illinois (312) 876-1172

Midwest's Largest Distributor of Turfgrass Seeds. Custom Blending & Free Delivery (150 mile radius with \$100 minimum purchase). Plus a Complete line of USS Agri-Chemicals, Fertilizers, Herbicides, Insecticides, and Monsanto's Turf Regulator, Limit.