

Who Upset Mother Nature? How the Drought Impacted Sod Growers

Trebro autostack sod harvester and load of sod with linear irrigation in the background.

I'm not sure who upset Mother Nature, but she has not been very pleasant this year. Over the past year, she has thrown us several curveballs. It started with last winter, when in southern Wisconsin and the northern counties of Illinois, we experienced varying degrees of winterkill damage, mostly on established turf. In some instances in southern Wisconsin, established sod fields sustained up to 50% damage. This was just the first of many challenges this year, and it was subsequently compounded by heavy demand on turfgrass sod, beginning a sod shortage that really won't be felt until next spring or early summer.



A 1/4-mile-long irrigation line will irrigate 33 acres a day at 1" of water (1,000 gpm).

We were one of the lucky ones. Our northern farm received minor damage due to winterkill. If you remember back to last Thanksgiving, the weather was very mild and the turf tissue was still very supple. Then, during the IPTC, we received anywhere from 1" to 8" of snow depending on where you were. Ice formed under the snow then receded during December. Once again in January, we had a dramatic warm-up to the point that the frost came out of the ground and we were able to harvest once again. This lasted only a few days before the cold air returned. The Chicagoland area received anywhere from 1/2" to 2" of rain, which turned to ice once more. The rest of winter was relatively mild to normal.

Spring hit but the April showers did not. So far this year, the Chicagoland area is roughly 10 inches of rain below normal. This was good for business; little rain means landscapers are able to get more ground prepared for sodding. Most sod producers stripped well above their quotas, for not only April, but also May and June. Lack of rain from Mother Nature is not always a bad thing for this very reason. This year, however, watering bans were out earlier than the typical timeframe of around the 4th of July weekend. Not only did almost every suburb reduce watering to even/odd days for a set number of hours, most ended up with complete watering bans on turf. During this time of year, we typically expect business to slow down but not

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come to a screeching halt. Let me give you an idea of how it affected our sales: by the end of June our numbers were up more than a million dollars over the prior year in total sales, including our hardscapes, but by the end of September not only did we give up the million, we were behind in sales by almost the same amount over just a 90-day period.

Not only were the watering bans stricter than in years past, they were not removed by the usual date of September 1. They lasted, in some cases, until October 1. The last drought of this magnitude was 1988, which ended up being one of our best years ever in sod sales, so we are hopeful for a turnaround. However, drought, along with the excessive heat, slowed rhizome production this summer, which suggests emergence of a longer-term problem. Strong demand, combined with these adverse growing conditions, could produce a supply problem by the summer of 2006 with some growers. The verdict is still out on what sales will do the rest of this year. If it con-

tinues to be dry and winter doesn't come early, before Thanksgiving, I think sales will continue to be strong.

Then, we dealt with the most damaging and numerous hurricane season since they started keeping records. I know we all live in the Midwest and hurricanes don't affect us directly, but they did affect us financially. Take the price of diesel fuel, for example; over the past year, it has gone up almost \$1.50 per gallon. With a fleet of trucks to deliver our products, in an average year our fleet travels roughly a million-plus miles. That means if a semitractor gets an average of 6 mpg driving in the greater Chicagoland area, we just incurred an additional expense of about \$200,000 (1 million miles driven at 6 mpg with an average increase of \$1.25 a gallon), which chews up a good portion of profits. Now take in the fact that sod producers have to irrigate their fields. At H & E, we have 14 (10 diesel, four electric) wells, most of which use anywhere from 50 to 70 gallons of fuel per day to irrigate just under 3,000 acres of

turf. Thus, we experienced more than \$3,000 per week in additional expense for irrigation. To top it all off, due to the fact of lack of moisture from Mother Nature most of us started irrigating earlier than normal, and the trend seems to be that we will be irrigating longer into fall than usual unless there is a dramatic change in temperature, which will add to expenses.

This was one of the toughest years on record economically and meteorologically. It would be nice to find out what upset Mother Nature so things can be set right with her. Hopefully in 2006 we will have a normal year, meteorologically speaking. With the Gulf Coast getting back on its feet, we can also hope things will smooth out economically. If we are lucky, the price of oil and natural gas will come down, which will reduce the cost of fertilizers and fuel used by all of us. This has been an interesting year, but I can't wait to see what next year will bring us. 



Linear irrigation tower.



How Drought Impacts Trees and Shrubs

"The drought is over, thank goodness we can forget about that and move on to other things."

For most plants in most situations, with the exception of old specimens, the detrimental effects of drought will likely manifest themselves over a two-to-three-year period.

However, if you are a tree or shrub, the effects from the drought of 2005 are far from over. While recent rains have provided relief, the effects from this summer's drought will be with us for the next few years. The stresses imposed upon plants will affect winter damage, shoot growth for next season, flowering and fruiting for next season and may lead to the development of several drought-related disease and insect problems. Long-term effects vary with the establishment of the specimen, the species, the amount and pattern of subsequent precipitation, fertility levels, the severity and the timing of the drought, and additional stresses placed on the plant.

Before overreacting, remember that summer drought is an occasional but predictable fact of life. Drought is a normal occurrence that plants in cultivated situations as well as those in native areas will experience many times in their lives. Plants also have some ways of using the initial stages of a drought to better prepare themselves for more severe drought. Moderately stressed trees make more efficient use of water and nutrients and develop a more extensive root system. Stressed plants also increase their carbohydrate storage and levels of defense chemicals needed to fight off insect and disease problems.

Although drought may be normal, that does not lessen its impact on our landscape plants. Long-term damage, especially to large old specimen trees, can result from a serious drought. While we might easily see the effects over a season, a long-term decline in vigor can put a prized old tree in a steady spiral of decline, making it more susceptible to additional stresses that might otherwise have had a negligible effect. An example of long-term effect can be seen in the decline of the Black Forest in Germany. Some of that deterioration was attributed to a severe drought 30 years previous. For most plants in most situations, with the exception of old specimens, the detrimental effects of drought will likely manifest themselves over a two-to-three-year period.

Immediate and Short-Term Effects

Immediate effects of drought include leaf wilting in the initial stages followed by leaf scorch or marginal browning and leaf drop as the stress

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continues. Drought stress during leaf expansion will decrease the size of leaves as water is essential to provide the turgor pressure needed to expand cells. A prolonged drought can result in significant damage to the roots as well as the shoots and cause branch dieback or even plant death. As in so many things, timing is important in determining the effects of the drought. Early-season droughts tend to be more damaging than late-season droughts. Newly emerged leaves and shoots are particularly susceptible to water shortages. The level of injury is greatly increased if the plants are not fully established. To be fully established might require approximately two years for most shrubs and two to four years for trees, depending upon their transplantability.

Although drought affects the whole plant, the injury to leaves is what is most obvious. Leaves produced under drought conditions are smaller and more highly dissected to reduce transpiration. With this year's drought, leaves on birch and poplars fell earlier and many other species showed leaf curl and browning of their leaf margins. In a drought, many trees will also show early fall coloration, a sign of stress on the plant. Because water is essential to the uptake of nutrients from the soil, this summer's drought produced leaf yellowing on some species—a sign of nutrient deficiency. While water stress adversely affects leaf growth, plants find ways to use that stress to their advantage. Leaves produced during a drought are better able to handle further water stress than those produced under lush growing conditions. As a plant approaches winter, its drought tolerance increases with cold tolerance and then decreases in spring.

Drought injury frequently induces heavy flowering and fruiting in the same or subsequent years and thus leaves less energy for shoot growth and production of proteins essential to a wide variety of plant functions. Some of our flowering shrubs can be expected to flower and fruit heavier next year in an effort to reproduce before any further stress causes death.

Although drought effects are most easily seen on leaves, plant roots suffer as well. Shallow-rooted trees such as flowering dogwood and sugar maple are much more sensitive than more deeply rooted trees such as black walnut and many of the oaks. To compensate for the shortage of available water, plants under moderate stress produce proportionally more root growth than shoot growth. Roots of woody plants do not go dormant and continue to grow until nearly frozen. Because physiological processes continue in roots throughout the year, adequate moisture must be available at all times to prevent



Trees in parking lots or those surrounded by concrete should receive special attention to avoid further water stress.

injury. Therefore, be sure your landscape plants have an adequate but not excessive amount of moisture before the ground freezes.

Internal or physiological effects of drought help to explain what we see on the outside. Water stress reduces cell enlargement more than cell division, thus explaining the reduction in leaf size attributed to drought. Growth is limited by even mild water deficits, producing a decrease in leaf number and size and reduced shoot length. Photosynthesis continues to function relatively unhindered under slight to moderate stress, allowing plants to handle the occasional drought with minimal effects. Severe water shortage, however, damages the photosynthetic machinery

responsible for providing energy to all plant processes. Respiration, the process through which plants convert stored energy to usable forms, is also inhibited under severe stress. Synthesis of proteins, the building blocks of life, is inhibited by severe drought. When water stress becomes severe, plant survival depends upon the degree of dehydration that the protoplasm in the cells can endure without undergoing irreversible injury.

Plant fertility also plays a role in determining the effects of a drought. Well-fertilized trees and shrubs are more susceptible to damage from a drought. Most fertilizer applications contain nitrogen to stimulate shoot growth. The shoot growth stimulated by nitrogen fertilizer can come at the expense of root growth. Rapidly growing trees are thus more susceptible to drought than slower-growing specimens. Well-fertilized trees will typically need more irrigation and pesticide sprays than plants that are under moderate to low levels of fertility. Unless trees are showing nutrient-deficiency symptoms, fertilizing trees increases shoot growth without increasing photosynthesis. If you fertilize following a drought, use one with low nitrogen and higher phosphorous and potassium to rebuild root systems.

Drought can be a major contributing factor to insect and disease problems. Water stress increases plant susceptibility to wood-boring insects and canker diseases. Following a drought, Cytospora canker becomes more likely on maples, mountain ash, poplars, spruce and willows. Nectria canker will be more likely on ash, birch, black walnut, crabapple, elm, lindens, locust, maples and oaks. Botryosphaeria canker can affect American sweetgum, beech, black tupelo, crabapple, flowering cherries, flowering dogwoods, hickory, horsechestnut, London plane-tree, redbud, willow and many others. The canker diseases are especially likely on newly transplanted specimens of these and many other species. Look for brown sunken oval patches on plant stems. Once a canker grows to surround the stem, the branch above that point dies. Prune out and destroy infected branches in dry weather and

avoid further stresses on the plant. Drought will also increase the development of some vascular wilt diseases. Verticillium wilt, a fungal disease with a host range in excess of 300 species, is more likely to show up following drought stress. Aphids and spider mites, although less serious than the above problems, are often seen to greatly increase in number in a drought season due to the simultaneous increase in temperatures that often accompanies drought.

An Ounce of Prevention . . .

Prevention is one of the best weapons a manager has to combat drought injury. Choosing native plants that are adapted to local water cycles is one of the most effective strategies.

Obtaining plants propagated from specimens that were growing within 50 or 100 miles of your site will ensure the best adaptability. At the same time, since we have many sites

that are so drastically modified from their native condition, do not fail to look at non-native species that might be better adapted to some of these highly disturbed sites. Select plants from dry environments that will not require frequent supplemental irriga-



Soil aeration and watering will reduce the impact of drought stress on trees subjected to soil compaction and reflected heat from the street.

tion to keep them looking good. Species such as spruce, fir and Canadian hemlock are native to cool moist areas and require frequent irrigation in a drought. Each species has its own

level of drought tolerance depending upon its adaptational features. For further information on plant selection and drought-tolerant species, call upon your local extension agent or visit my Web site at www.woodyplants.nres.uiuc.edu.

As I look into my crystal ball, I foresee an increase in drought episodes attributable to a changing climate and at the same time, more frequent watering restrictions for landscapes. Selection of species able to survive with reduced water inputs is likely to be essential in future landscapes. The use of organic mulches around trees and shrubs can do a lot to reduce the effects of drought and to modify the effects of high temperatures that often accompany droughts. A two-

to-four-inch layer of shredded bark, wood chips or other organic material can greatly reduce water loss and provide a more uniform moisture supply

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TABLE 1.
Selected List of Drought-Tolerant Species¹

TREES	COMMON NAME	NATIVE TO U.S.	SHRUBS	COMMON NAME	NATIVE TO U.S.
<i>Acer campestre</i>	Hedge Maple	N	<i>Acanthopanax sieboldianus</i>	Five-leaf Aralia	N
<i>Acer ginnala</i>	Amur Maple	N	<i>Ceanothus americanus</i>	New Jersey Tea	Y
<i>Albizia julibrissin</i>	Mimosa	N	<i>Chaenomeles</i> spp.	Flowering Quince	N
<i>Castanea mollissima</i>	Chinese Chestnut	N	<i>Comptonia peregrina</i>	Sweetfern	Y
<i>Catalpa speciosa</i>	Northern Catalpa	Y	<i>Cornus racemosa</i>	Gray Dogwood	Y
<i>Carya ovata</i>	Shagbark Hickory	Y	<i>Cornus sanguinea</i>	Bloodtwig Dogwood	N
<i>Celtis occidentalis</i>	Common Hackberry	Y	<i>Corylus</i> spp.	Filberts	Y/N
<i>Corylus colurna</i>	Turkish Filbert	N	<i>Cotinus</i> spp.	Smokebushes	Y/N
<i>Crataegus</i> spp.	Hawthorns	Y	<i>Diervilla</i> spp.	Bushhoneysuckles	Y
<i>Eucommia ulmoides</i>	Hardy Rubber tree	N	<i>Hippophae rhamnoides</i>	Common Sea Buckthorn	N
<i>Fraxinus pennsylvanica</i>	Green Ash	Y	<i>Hypericum</i> spp.	St. Johnsworts	Y
<i>Ginkgo biloba</i>	Ginkgo	N	<i>Juniperus</i> spp.	Junipers	Y
<i>Gleditsia triacanthos inermis</i>	Thornless Common Honeylocust	Y	<i>Kolkwitzia amabilis</i>	Beautybush	N
<i>Gymnocladus dioica</i>	Kentucky Coffeetree	Y	<i>Lonicera</i> spp.	Honeysuckles	N
<i>Juglans nigra</i>	Black Walnut	Y	<i>Fallopia japonica</i>	Fleeceflower	N
<i>Juniperus virginiana</i>	Eastern Redcedar	Y	<i>Physocarpus opulifolius</i>	Common Ninebark	Y
<i>Maclura pomifera</i>	Osage-orange	Y	<i>Prunus</i> spp.	Flowering Plums and Cherries	Y/N
<i>Phellodendron amurense</i>	Amur Corktree	N	<i>Rhus</i> spp.	Sumacs	Y
<i>Pinus flexilis</i>	Limber Pine	Y	<i>Ribes</i> spp.	Currants	Y/N
<i>Pinus mugo</i>	Mugo Pine	N	<i>Rosa rugosa</i>	Rugosa Rose	N
<i>Pinus nigra</i>	Austrian Pine	N	<i>Spiraea</i> spp.	Spireas	N
<i>Pinus ponderosa</i>	Ponderosa Pine	Y	<i>Symphoricarpos orbiculatus</i>	Indian currant Coralberry	Y
<i>Pinus sylvestris</i>	Scot's Pine	N	<i>Viburnum prunifolium</i>	Blackhaw Viburnum	Y
<i>Populus deltoides</i>	Eastern Cottonwood	Y	<i>Yucca</i> spp.	Yucca or Adam's Needles	Y
<i>Pseudotsuga menziesii</i>	Douglas-fir	Y			
<i>Quercus macrocarpa</i>	Bur Oak	Y			
<i>Quercus montana</i>	Chestnut Oak	Y			
<i>Quercus muehlenbergii</i>	Chinkapin Oak	Y			
<i>Robinia pseudoacacia</i>	Black Locust	Y			
<i>Shepherdia argentea</i>	Silver Buffaloberry	Y			
<i>Sophora japonica</i>	Japanese Pagodatree	N			

¹ Plants included on this list are moderately drought-tolerant. Supplemental water will be required for many of these species under extreme conditions.

to the plant. Avoid mulching too deeply as this reduces soil aeration and encourages plants to develop roots in the mulch area, making the plants more susceptible to drought if the mulch layer is not maintained. The mulch should not be more than 1-2" deep around the trunks of trees to avoid encouraging fungal attacks through the bark. The mulch should ideally be in place well in advance of a drought to conserve the normal rainfall or irrigation water. The mulch should remain in place through the winter to moderate the effects of severe winter temperatures. Depending upon the breakdown rate of the mulch material, it will need to be replenished at least once a year. Rock mulches have few beneficial effects and several negative ones.

As you select new plants for your landscapes, be sure to purchase them from quality nurseries. Plants produced in quality nurseries often have superior root systems as a result of root pruning in the production process and planting at the proper depth. Trees should have their first branch roots just below the surface. Although planting too deeply may give the plant some initial benefit in terms of soil-moisture availability, the long-term health of the root system will be greatly diminished in the lower oxygen levels found at lower depths. Subjecting plants to slight to moderate water stress a few weeks prior to planting helps to "harden" the plant and increase its transplant survival.

Checklist for the Conscientious Manager

There are also a number of things that a conscientious manager does following a drought. Make a point of remembering which plants were particularly stressed this past season and watch them closely in the next few seasons. Provide those plants water during small future water deficits and consider some shoot pruning to balance the root system if the stress was particularly hard on the plant. Watch these plants for signs of canker and vascular diseases as well as boring insects. These problems are likely to build in the following years, especially in the presence of additional stresses. Also watch plants for excessive moisture levels following a drought. There are

many times when a drought is followed by long periods of exceptionally heavy precipitation in the following season. The resulting water-logging of the soil for many weeks can further damage plant roots. Anticipate those conditions by providing adequate drainage for key specimens and avoid overwatering to compensate for drought injury. Most trees and shrubs in the landscape should not be watered more frequently than once a week. If stressed plants

were not previously mulched, consider doing it now. A mulch layer will reduce root injury if we get a very cold winter with little precipitation. Be sure to avoid further injury to already stressed plants through soil compaction or bark injury. The addition of another stress may be sufficient to tip the balance of survival.



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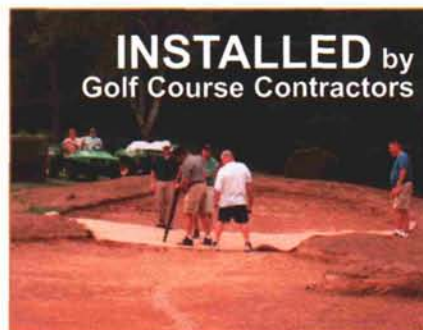
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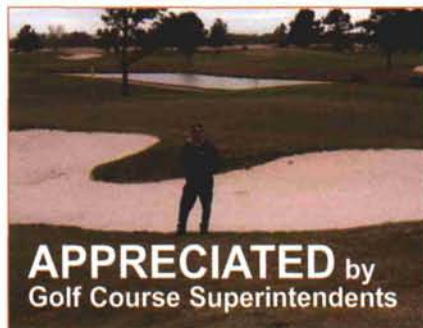
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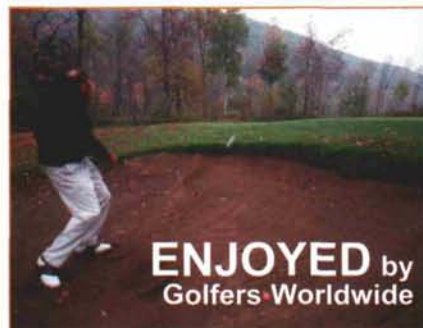
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Rick Bowden Takes Novel Approach to Putting-Green Expansion at Bob O' Link Golf Club

Rick Bowden has recently completed a remodeling project that included—among other things—the expansion of putting surface on 13 of his greens. Overall, Rick has added 10,000 square feet to his putting surfaces. For the grassing of this work, Rick used aerifier plugs from the existing putting surfaces. Consequently, the texture and appearance of the added putting turf has blended perfectly with the original greens.

Rick developed the following steps for this procedure:

1. Beginning in mid-September, sod-cut and remove the bentgrass collars and bluegrass sod in the designated expansion areas.
2. Aerify the exposed dirt with hollow-core tines.
3. Aerify the existing green with 5/8" hollow-core tines and collect the plugs.
4. Spread the plugs out evenly over the expansion area, at an elevation three-quarters of an inch higher than the putting turf.
5. Apply A-4 seed over the top of the plugs and rake smooth.
6. Lay plywood over the plugs and compress with a heavy roller to match grade.

7. Keep the plugs moist with hand-watering until they develop stolons and leaves.

8. Begin mowing and frequent topdressing.

By mid-May of the following year, the height of cut in the expansion areas is brought down to the same height of cut as the existing greens.

This process has created a variety of great new hole-cup placements at Bob O' Link.

The expansion areas were marked as "ground under repair" in the early stages of their development, but Rick reports that this was never a problem and he never had a complaint from his members. On the greens where more than one corner or edge of the green was expanded, Rick worked on only one area per season.

Rick has had so much success with this method of replicating the texture and consistency of his turf that he has even used this same procedure on a much larger scale for expanding the fairway approaches on par-3 holes.

—Brad Anderson, CGCS, Midlane C.C.

New Construction Poses Fresh Challenges for Coyote Run's Dave Ward

Coyote Run is the first project where Dave Ward has built an entire golf course from scratch, and Dave sees a couple of things in particular about the new construction process as a contrast with his former experiences with the management of older golf courses.

Whereas on an older golf course you are searching and probing for an old farm tile to tie into your drainage work, everything about a new golf course is engineered to shed water quickly and effectively. On the downside, however, the topsoil over the finished product of a new golf course is spread much thinner than the one-to-two-foot horizon of prairie topsoil that you generally inherit on an older golf course. So while drainage is not an issue, fertility and soil conditioning are much more critical.

Coyote Run is one year old now, and while the jury is still out, Dave is very pleased with his choice of grasses. On greens Dave used 50% Alpha, 25% A4 and 25% A2. Throughout the entire 2005 growing season, Dave has

found abundant roots growing beyond the depth of his hole-cup cutting. He has had a pretty good run of play on the greens, but the ballmarks don't seem to be as big of an issue as what is generally reported to be problematic with the newer generation of denser bentgrass strains, even on the greens that receive wedge shots. It is too early to make a strong case for Alpha, but Dave feels that Alpha may be a good putting turf for daily wear and tear.

On tees, Dave specified T-1. This bentgrass has shown great lateral growth for divot regeneration.

On fairways, Dave specified 50% L93 and 50% Southshore. This blend handled the summer heat and drought of 2005 exceptionally well, and Dave anticipates that it will perform even better under dry management, once it has developed a mature live-thatch layer.

Dave is conditioning his greens early on to be accustomed to periodic flushing. Dave flushed his USGA

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greens four times in 2005 by turning his perimeter sprinklers inwards and scheduling them to run in alternating cycles throughout the entire night with his full-circle sprinklers. On one of the USGA greens, Dave uses an open catch basin downstream of the drainage system to

visually monitor the flow of water from his periodic flushings and he reports that this irrigation program really gets the water flowing through the tiles.

—Brad Anderson, CGCS, Midlane C.C.



Benjamin Morales mowing no. 15 green at Coyote Run. The new clubhouse is in the background.



No. 18 green.



No. 13 green.



No. 7 green, banked by one of the five lakes on the course.

At Twin Orchard Country Club, Dave Blomquist Bypasses Conventional Hollow-Tine Core Aeration on Greens

Dave Blomquist is one of the growing number of golf course superintendents who is finding practical alternatives to the inconvenience that golfers associate with conventional hollow-tine core aeration.

On putting greens, Dave is hydrojecting in the up position, several times per season. Dave is confident in the results of this program, and he sees no need for core aeration or deep-tining of greens; however, he hesitates to completely rule out the possibility of deep-tining greens at some time in the future.

On fairways, Dave uses solid-tine aeration and sand topdressing. This summer, Dave topdressed the fairways lightly with the Antioch root zone sand, once every week,

from 100 yards in towards the green. The results of this program were so beneficial that Dave plans to expand on the program next season by topdressing the entire length of his fairways every week. By topdressing every week, as opposed to monthly topdressing at higher rates, Dave feels that he runs less of a risk of layering problems in the future. Also at the light rates, an entire course can be topdressed in one work day.

This fall, Dave is making infrastructure improvements to his shop area: a new wash pad, more parking and expanded office space.

—Brad Anderson, CGCS, Midlane C.C.

Michael Sauls Oversees Successful Renovation of Butler National

Michael Sauls has recently completed a major renovation of Butler National. The golf course reopened to rave reviews on June 1, 2005.

Butler National was originally designed in 1974 by George Fazio. His nephew, Tom Fazio, was on hand for much of the original construction process. Subsequently Tom Fazio has always taken a great interest in the evolution of Butler National, and it was his design firm that was awarded the remodeling contract for Butler in 2004.

Tom Fazio had a lot of personal input into the project at Butler, but the drawings and field management were handled primarily by his senior associate, Tom Marzolf, who specializes in all of the contracts that Fazio's firm performs for tournament venues, e.g., Oak Hill, Oakmont, Riviera, Winged Foot.

The goal was to bring the golf course up to speed with modern technology. Consequently, the twelfth hole, which formerly played as a par 5, is now a par 4. The Butler National card now plays to a par 71. Renovation included rebuilding eight tees and adding 150 yards to the length of the course.

Twelve fairway bunkers were added, and many of the original fairway bunkers were moved to longer locations and tighter to the driving lanes, with the effect of narrowing the landing zones. All of the greenside bunkers were rebuilt, and the style is distinctively Fazio. The bunker sand of choice was Signature Sand out of Ohio. Installation of Sand Trapper liners in every bunker should preserve the integrity of the Signature Sand from subsoil contamination.

Removal or relocation of some trees took place, and Michael has introduced many oak tree plantings to the property.

The greens were fumigated and grassed to their original contours with A-1. One year prior to the project, Michael amended the greens soils with three separate Floyd McKay drill-and-fill applications of sand. Michael has been patient to allow the A-1 to mature, and he is very excited about how well they will perform next season. They are only one year old now, but they are developing a very fine and dense texture through grooming and verticutting.

—Brad Anderson, CGCS, Midlane C.C.



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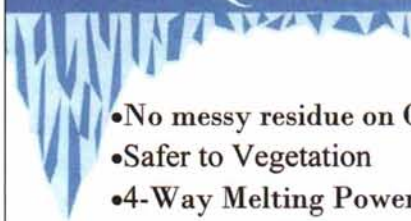
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the Bull Sheet

John Gurke, CGCS, Contributing Editor

DATES TO REMEMBER

December 5 – The Annual South Side Holiday Party at the Bier Steub in Frankfort, IL. GCSAA education points have been applied for.

December 12 – The Annual West Side Holiday Party at Dave & Buster's in Addison, IL. You didn't really believe that bit about the GCSAA points, did you?

December 12 – Uh oh, schedule dilemma: Northwestern Illinois GCSA and GCSAA Education present "Turfgrass Stress Management" featuring Karl Danneberger, Ph.D., Ohio State University and Joseph M. DiPaola, Ph.D., Syngenta Crop Protection, Inc. at the Ramada Suites & Rockford Conference Center in Rockford, IL.

December 15 – Deadline for applications to be postmarked for the AXA Achievement Scholarship in association with *U.S. News and World Report*.

January 3–March 10 – The Rutgers Professional Golf Turf Management School's Two-Year Certificate Program Winter Session in New Brunswick, NJ. Call 732-932-9271 for info, or go online at www.cookce.rutgers.edu.

January 16–February 3 – The Blah blah Rutgers blah blah Three-Week Preparatory Short Course in New Blahblah, NJ—same number, same address as above.

January 17 & 18 – MAGCS and GCSAA Education seminars at Midwest Golf House—keep an eye on your mail for more details.

January 24 – MAGCS monthly meeting at Prairie Landing Golf Club in West Chicago, IL, **Tony Kalina** host.

Welcome to the following new members of MAGCS, and best wishes for a long, prosperous stay:

Jeff Frentz, superintendent of Lake Shore Country Club;

Tim Fischer, assistant superintendent at Joe Lewis G.C.

Hey you new guys, and old guys alike: Want to get MAGCS news quick and hot off the presses? Sign up for e-mail notification by contacting executive director Luke Cella at luke@magcs.org. And if you already have this service, but haven't heard from us lately, could it be you've changed your e-mail address recently? If so, let Luke know your new one and he'll get you back in the loop toot-sweet.

You kinda knew this was coming—from the Bolingbrook Golf Club (home of the 76,000-square-foot clubhouse and **Jeff Gerdes'** stomping ground) comes word that John Daly and architect John Robinson will collaborate on a new golf course across the street tentatively named Big Stick. The course will stretch more than 8,200 yards, making it one of the longest tracks in the country. And golf isn't hard enough as it is . . .

You know, nothing beats this time of year when we can finally take a breather and get away for a few days of much-needed rest and relaxation. Good old **Scott Speiden** (Itasca C.C.) would qualify as an example of taking the R & R motif a little too far . . .

It starts with a visit to Wisconsin's oldest bar . . .



After that, of course, it's time to mount the all-terrain vehicles for some fun . . .



Which leads, inevitably, to the triple-lindy-end-o crash in the mud pond . . .



And the Al Jolson-looking male-mud-wrestler result . . .



Where I can I sign up for some of that fun?

Congratulations to **Mark Gilmour** (J. W. Turf) on recently getting old. Mark turned 50 in October, and his wife, Barb, and family threw a down-home barn dance-type deal with hayrides, bonfires, burgers and just about all the other stuff that barn dances are famous for (except there

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