

regularly for oviposition events and larval activity sites from early-May through early-October 2003 and are also currently being checked regularly. These data should provide insight as to susceptible *Tilia* cultivars and species of the linden borer and also provide more information regarding the biology of the linden borer.

Because chipping of felled trees is a standard practice in the green industry for tree disposal, an additional study is being conducted to determine whether chipping is an effective means of destroying linden borer infested wood. Six dying 'Greenspire' linden trees were acquired from various locations. Each trunk was quartered longitudinally and one quarter was chipped by a Bandit Model 250 chipper and one quarter was chipped by a Bandit Model 90 chipper. The remaining quarters were cut into firewood length pieces, and one quarter was covered with aluminum screening and left outside and the other was covered in aluminum screening as well, but placed in a controlled environment to account for cage effects. Separate chip piles were made for each chipper type and placed in a completely randomized design at a location in Jackson, WI. Chip piles were covered with aluminum screening, and the number of adults captured will be compared among treatments (i.e., trunk quarters) to determine the effectiveness of

chipping wood infested with linden borer larvae.

Lastly, another study is being conducted to determine the number of larval instars of linden borer. Determining the number of instars is an important key to learning more on the biology of this important pest. Four *Tilia cordata* cv. 'Greenspire' linden trees with over 50% dieback were obtained from three different cities in Southeastern Wisconsin. An average of 22.7 feet of the trunk wood from the ground up was taken to the lab in approximately two-foot sections for examination. Larvae were removed and a multitude of morphological measurements were taken from over 1500 larvae.

The value of the linden tree as an ornamental, shade, and street tree is likely to dramatically rise over the next few years, especially due to the fact that other popular trees, such as ash and maple, are targets for other potentially invading insects including the emerald ash borer (EAB) and the Asian long-horned beetle (ALB). The primary objective of this research is to gain a more comprehensive understanding of the biology of the linden borer and to develop effective management strategies that will help nursery growers, landscape managers, arborists, golf course superintendents, municipal park managers, homeowners, and others effectively manage this important ornamental insect pest in a cost effective manner. ♣





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# Golf Where the Pros Golf at the WTA Fundraiser Brown Deer Park Golf Club

By Tom Schwab, O.J. Noer Turfgrass Research and Education Facility, University of Wisconsin-Madison

If ever you wanted to attend a WTA golf fundraiser event, this should be the year! This event is nothing but fun and is held at some of the nicest golf venues in the state. This year is no exception. Brian Zimmerman and Tim Wegner will host the event at Brown Deer Park Golf Course. This is where the greatest pros in the land will be golfing a few weeks previous to the WTA event. The date is Wednesday, September 15th, 2004.

Brian and Tim were able to secure a spectacular registration cost for the fundraiser. Seventy percent of the registration cost will go to turfgrass research. That cost is \$125 to play this wonderful golf course and benefit the turfgrass industry at the same time.

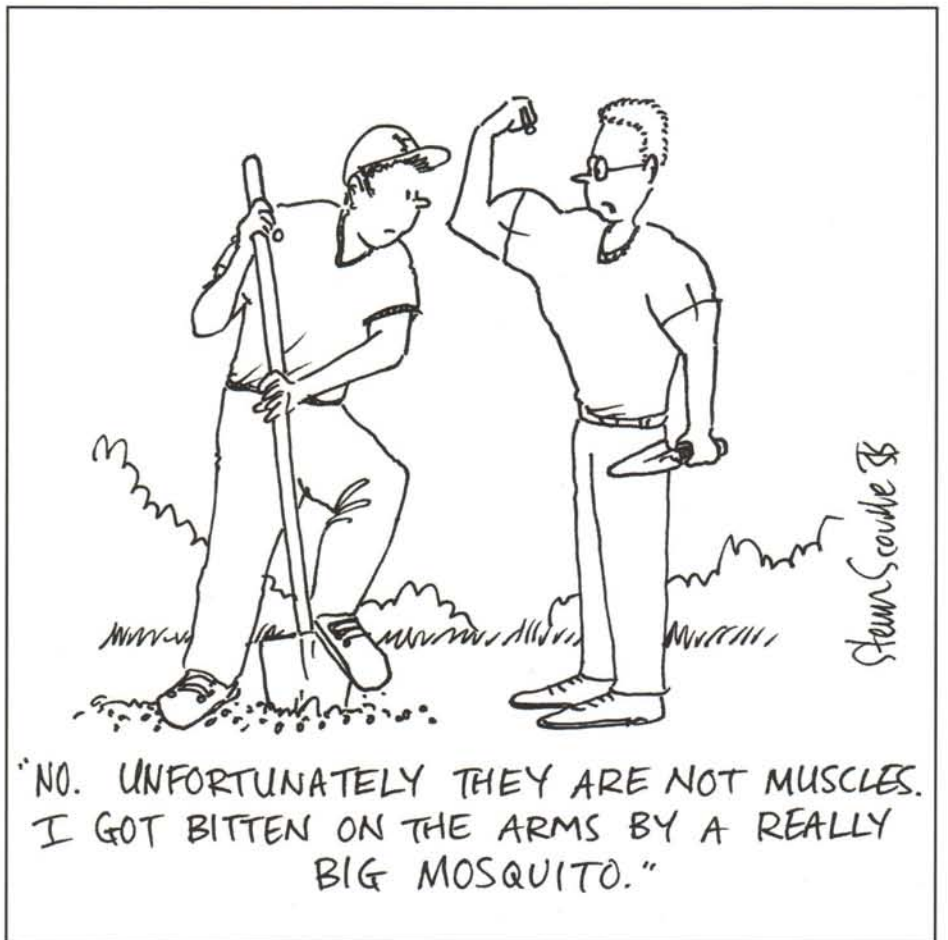
And golf isn't all you get for \$125. Every golfer gets a door prize. Many of those door prizes are worth more than the cost of registration. Some of the prizes last year included:

- TVs and boom boxes
- Golf clubs
- Several gift certificates for golf foursome passes
- Badger football tickets
- All kinds of clothes
- Golf balls
- Brief case
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The price also includes cart, practice balls, lunch, and golf prizes. It's quite the event for only \$125. Tell your friends. Tell your members. You'll all have a blast. Everyone goes home with nice prizes, a great golfing experience, and a great day with friends and colleagues. Details have been

mailed out to all WTA members. If you have further questions call Audra at 608-845-6536. I would

venture to guess that this event will sell out again like it has the last three years. ♣





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# We've Had Enough!

By **Monroe S. Miller**, Golf Course Superintendent, Blackhawk Country Club

Almost all conversations among Wisconsin golf course superintendents in the past six weeks centered around the weather. That isn't anything new. But those conversations were primarily complaining about too much rain. Way too much rain. Rain in disastrous proportions.

Let's face it — we are always complaining about the weather: too hot, too wet, too dry, too cold. But May and June gave us legitimate reasons to be frustrated. Rivers and lakes overran their banks, flooding fairways and greens and covering them with silt. Standing water caused serious declines in golf course conditions. Springs popped up in areas they'd not been seen in for years.

Soil conditions were saturated, but the rain kept coming with no place to go. Flooding affected entire communities — bridges and dams were damaged, raw sewage was discharged from treatment

plants, roads were impassable. Streams and rivers kept rising right through the middle of June. In our town we were lucky — the rain came down at reasonable rates. In other areas — Randolph and Cambria, for example — it came at the rate of an inch an hour for nine or ten hours. Likely there isn't a superintendent that doesn't have a nightmare story to tell.

The economic impact is scary. There were rainouts on four week-ends in the period, including Memorial Day weekend. Outings were cancelled. Golf didn't need this at this time, and many who know say these lost rounds usually cannot be gotten back.

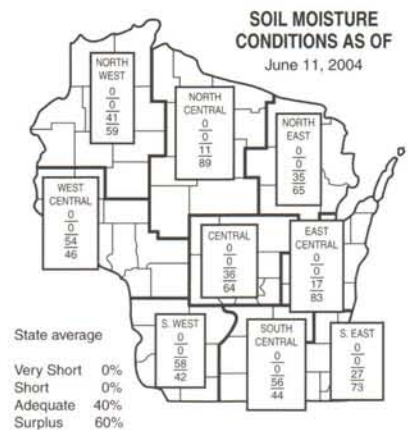
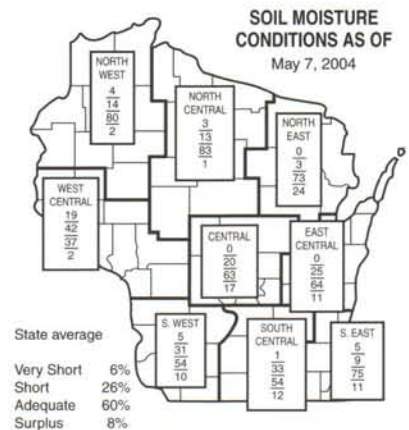
When I consider how golf is affected financially by a natural disaster like this one, I tend to think about lost rounds and green fees, food and beverage sales, golf car revenues and other issues close to our golf course operations. It was Rob Wasser who pointed out the disaster wrought upon suppliers and ultimately manufacturers. He talked of 11 lost sales days in May and how much that had affected his business. We aren't alone in the suffering.

May rainfall set records for the month all over Wisconsin. Many of the May records were set in 2000. In our town 10.84" of rain fell, breaking the previous record for May of 9.63". Also telling was the total precipitation to date of 18.27", well above the 11.41" average. For comparison, last year on May 31st we had received about one-half of what we did this year — 9.20". May was also a little cooler, obviously due to the lack of sunshine.

Of course, we don't know what

the rest of the season will bring. But I am more than a little worried. Wet, saturated soil conditions like we have experienced for six weeks have clearly damaged root systems of the turf. It could be a tightrope walk until we get to the cooler temperatures of autumn.

The summaries of soil moisture conditions as recorded by the Wisconsin Agricultural Statistics Service are here for your examination. Read 'em and weep.



Record setting weather like we've had inspired a little research for rainfall data from various meteorological Web sites. Here are some factoids for

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Wisconsin:

- The one-day record for rain was June 24, 1946 in Mellen when 11.72 inches fell.
- The village of Embarrass, just north of Clintonville, recorded the most rainfall for a calendar year in Wisconsin — 62.07" in 1884. For comparison, in our town the highest total since the 1800s was 43.34" in 1993.
- The one-month rainfall record belongs to Port Washington where 18.33" fell in June of 1996.

Of course, with all the rain comes the incredible aggravation from mosquitoes. Already we have plenty of them on our golf course and it will likely get worse.

The problem is exacerbated by the threat of West Nile virus, which first appeared in the U.S. in 1999.

The past five years have seen 14,000 cases of the disease nationally and 600 deaths. Last summer, which was so dry, saw 17 cases of West Nile in Wisconsin but no deaths.

For the sake of our employees, we can provide mosquito repellent with DEET and make sure they call a health care provider if symptoms appear. Also, report any dead or sick crows or blue jays, hints of the presence of the West Nile virus.

Extreme weather brings up the subject of global warming, and a recent survey of Americans shows two-thirds of us think it is a serious problem. Fifty percent think the "scientific evidence is in."

I haven't seen enough of that evidence yet to make me believe it is a sure thing and not part of normal climate change. Make no mistake — it is a worrisome problem. The thought

of Wisconsin having a climate like Arkansas is scary to me. If I wanted to live in weather like that I would simply move there. But the "For Sale" sign isn't up yet in front of my house. And I'll never move to Arkansas because you'd probably hear more about Slick Willie than we do now up here in God's country. That would be more than a normal person could be expected to handle.

Speaking of former presidents, I am still saddened by the thought that Ronald Reagan has passed away. Although we haven't seen him for ten years, there was comfort to me in knowing the great man was alive. As I said in the visit with Lori Bocher, I think he is the best president we have had in my lifetime.

Some serious ranking of presidents have him as high as fifth best,



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behind Washington, Lincoln, Roosevelt and Polk. His public approval when he left office was in the 65% range.

His popularity with the public is more than some in this town can handle, and one newspaper in particular could only find negative aspects in the man. But then they are the same ones in love with an immoral, dishonest, philandering and impeached former holder of that highest office in the land. Oh, well...

We took a week vacation after GCSAA conference in San Diego last winter and one of the visits we made was the Reagan Presidential Library and Museum in Simi Valley. That visit really brought the events of his funeral home.

And we are fortunate we live so close to a couple of Reagan historical sites. Just south of the Wisconsin/Illinois border is Dixon, Illinois, Reagan's boyhood home. While there, drive two or three miles east and visit Grand Detour, John Deere's first home and blacksmith shop in the Midwest. Not far from there is the small village of Tampico, Illinois; you can see the store his family owned when he was born.

There are other sites a little farther away — he first worked in the Quad Cities, and Eureka College is just east of Peoria.

Hail to the Chief.

Consolidation in our business continues. Briggs & Stratton Corporation signed an agreement a month or so ago to acquire Simplicity Manufacturing of Port Washington. The price in cash was \$227,500,000.

Briggs is the world's largest producer of air-cooled gas engines for outdoor power equipment, including a lot that is used on golf courses. Briggs & Stratton headquarters is in Milwaukee and it also has manufacturing there.

Simplicity owns Snapper, Ferris and Giant Vac, all familiar names to golf course superintendents.

The ordinances to ban fertilizer phosphorous in Madison and Dane county, predictably, passed. Jeff Millies spent a lot of time and did a lot of work representing the superintendents of Wisconsin during the hearing period.

Since passage, a group of lawn care businesses and fertilizer retailers have filed claims with the city and county, challenging these phosphorus bans. As I understand it, these claims are precursors to lawsuits.

An attorney representing the fertilizer groups claims both ordinances are flawed with regard to compliance, are vague and create a confusing patchwork of rules that try to preempt state and federal laws.

Among those bring the suit are CropLife America, Responsible Industry for a Sound Environment (RISE), the Wisconsin Fertilizer and Chemical Association, the Wisconsin Landscape Federation, Midwest Hardware Association, and a number of individual local businesses.

It was well reported that Dr. James B. Beard donated his personal turfgrass library collection to the Turfgrass Information Center at Michigan State. Dr. Jim Love brought by a copy of the *CSA News* that detailed Dr. Beard's gift to our industry.

The Beard Collection includes international coverage of the turf-

grass research and management literature contained in more than 30,000 books, periodicals and technical reports. It serves as a non-circulating reference collection with the Turfgrass Information Center and TGIF will provide us with article level access to all the items within this fabulous collection.

Dr. Beard, of course, was featured at the 2004 Wisconsin Turfgrass Expo last January.

We've gone through another tough weather period. A question I think about is whether I would rather have too much rain than too little. On the one hand, when it is dry and you have to irrigate, you have more control.

But irrigation over an extended time period is imperfect at best, and the equipment can give a superintendent fits with failures, even small ones. The distribution is uneven and shows in a matter of a couple of weeks. A full-blown drought can be devastating to woody plant materials on the golf course.

Too much rain, however, takes control away and too many play days can be lost. If it gets hot, diseases can ravage a golf course.

Here's the good thing: no matter what one prefers, we have no control over the weather. All we can do is make the best of it. That might be our motto for the rest of the 2004 golf season — let's make the best of it! ♣

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# Who Needs Irrigation Anyway? Thank You Donators

By **Tom Schwab**, O.J. Noer Turfgrass Research and Education Facility, University of Wisconsin-Madison

The new land at the Noer Facility is nearing completion. Rettler Corporation designed the grading for the land. The Bruce Company shaped the land. Olds Seed Solutions and Spring Valley donated the seed and fertilizer to grow in the land. And now the irrigation system is being installed because of many more generous donations.

The plots will be ready for research by July 2004. Dr. Jung couldn't wait and has two breeding projects already installed on the new land. Dr. Stier is ready to install two product evaluation studies as soon as possible. He also anticipates that most of the new plots will have studies on them in the very near future. This is very exciting for the turf industry in Wisconsin. More studies mean more answers to help us do our job better.

This new irrigation expansion will add 32 irrigated plots to our existing 128 at the Noer Facility. The new

land has room for another 40 plots that will be added in a second phase after most of the first phase is occupied. Time will tell how quickly the first phase gets occupied but some of the researchers think it will be fairly soon.

Installing the plots was quite the chore. I anticipated it would take about four long days to trench in the pipe and assemble all the sprinklers, valves, and wires. Instead it took eight days because of all the rock we had to trench through. None of my staff had ever installed irrigation either. But they learned so fast, worked so hard, and should be commended.

The weather even cooperated. We sometimes wondered why we're installing irrigation when it rains every other day. Madison received over 11 inches in May, breaking the all time record for that month. And it's raining again today as I write this article.

The rain eventually stopped long enough for us to



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