#### NOTES FROM THE NOER FACILITY

WSTMA president, summarized the organization's goals and future plans, and invited everyone to the next meeting, which will be held April 22nd in Wausau. Lastly the financial statement was handed out which showed 63 members joining in their inaugural year. This broke a record for the number of charter members for all national STMA chapters. Leave it to Wisconsin to top the charts!

Speaking of numbers, there were many scholarships and donations announced during the conference that were important to the recipients. WTA past-president, Curt Larson, introduced the 1998 scholarship recipients and turfgrass research donors at the opening session. The donations make up a large part of the WTA annual budget for research, scholarships, and growth of the WTA endowment. The summary of donations is mentioned here. The list includes other individuals and groups that presented donations to WTA during fiscal year 1998, instead of during the conference. I may have overlooked a few donors, so I hope they will accept my apology. To those who gave, please accept WTA's thanks for your generosity.

AgrEvoSteve Pearson\$500BayerTrygve Ekern\$500Dave MellorTodd Blankenship\$350Spring ValleyScott Anther\$600WGCSA J.R. Love ScholarshipMark Livingston\$500WTARaechal Sager\$600WTABrandon Beagis\$60WTABrandon Beagis\$600WTAEric Counselman\$600WTAJohn Burge\$600WTAJohn Burge\$600WTAVTA\$500BayerWTA\$500BayerWTA\$500Bulls-Eye CCWTA\$100Bulls-Eye CCWTA\$100Cole Growers ServiceWTA\$500MilorganiteWTA\$500Milorganite/ HorstWTA\$2,000Milorganite/ HorstWTA\$500Nothern Great Lakes GCSAWTA\$500Novartis/ James KrutillaWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Ray SchmitzWTA\$31ProGreen PlusWTA\$515	Scholarship Donor	<b>Recipient</b>	Amount
BayerTrygve Ekern\$500Dave MellorTodd Blankenship\$350Spring ValleyScott Anther\$600WGCSA J.R. Love ScholarshipMark Livingston\$500WTARaechal Sager\$600WTABrandon Beagis\$60WTABrandon Beagis\$600WTAEric Counselman\$600WTAJohn Burge\$600WTAJohn Burge\$600WTAStoroWTAAqua AidWTA\$500BayerWTA\$100Bulls-Eye CCWTA\$1,290Cole Growers ServiceWTA\$500MilorganiteWTA\$500Milorganite/ HorstWTA\$2,000Milorganite/ Wisconsin TurfWTA\$1,220National Products ResearchWTA\$500Novartis/ FoxboroWTA\$110Novartis/ FoxboroWTA\$110Novartis/ Pat NortonWTA\$180Novartis/ Ray SchmitzWTA\$31ProGreen PlusWTA\$515	AgrEvo	Aaron Goninen	\$500
Dave MellorTodd Blankenship\$350Spring ValleyScott Anther\$600WGCSA J.R. Love ScholarshipMark Livingston\$500WTARaechal Sager\$600WTABrandon Beagis\$60WTAEric Counselman\$600WTAJohn Burge\$600WTAJohn Burge\$600WTAJohn Burge\$600WTAJohn Burge\$600MTAStoo\$600MTAWTA\$500BayerWTA\$100Bulls-Eye CCWTA\$1,290Cole Growers ServiceWTA\$500Creekwood FarmsWTA\$500MilorganiteWTA\$2,000Milorganite/ HorstWTA\$2,000Milorganite/ Wisconsin TurfWTA\$1,220National Products ResearchWTA\$500Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Ray SchmitzWTA\$180Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	AgrEvo	Steve Pearson	\$500
Spring ValleyScott Anther\$600WGCSA J.R. Love ScholarshipMark Livingston\$500WTARaechal Sager\$600WTABrandon Beagis\$60WTAEric Counselman\$600WTAJohn Burge\$600WTAJohn Burge\$600WTAJohn Burge\$600MTAWTA\$500Mark Livingston\$500WTABrandon Beagis\$600WTAJohn Burge\$600Murf Research DonorRecipientAmountAqua AidWTA\$500BayerWTA\$100Bulls-Eye CCWTA\$100Bulls-Eye CCWTA\$500Cole Growers ServiceWTA\$500MilorganiteWTA\$500Milorganite/ HorstWTA\$2,000Milorganite/ HorstWTA\$1,220National Products ResearchWTA\$100Novartis/ FoxboroWTA\$110Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Bayer	Trygve Ekern	\$500
WGCSA J.R. Love ScholarshipMark Livingston\$500WTARaechal Sager\$600WTABrandon Beagis\$60WTAEric Counselman\$600WTAJohn Burge\$600WTAJohn Burge\$600WTAJohn Burge\$600MTAStooWTAAqua AidWTA\$500BayerWTA\$100Bulls-Eye CCWTA\$1,290Cole Growers ServiceWTA\$500Creekwood FarmsWTA\$500MilorganiteWTA\$2,000Milorganite/ HorstWTA\$1,220National Products ResearchWTA\$1,220Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Ray SchmitzWTA\$180Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Dave Mellor	Todd Blankenship	\$350
WTARaechal Sager\$600WTABrandon Beagis\$60WTAEric Counselman\$600WTAJohn Burge\$600WTAJohn Burge\$600WTAJohn Burge\$600MTAWTA\$500BayerWTA\$100Bulls-Eye CCWTA\$1,290Cole Growers ServiceWTA\$500Creekwood FarmsWTA\$500MilorganiteWTA\$2,000Milorganite/ HorstWTA\$2,000Milorganite/ Kisconsin TurfWTA\$1,220National Products ResearchWTA\$500Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Spring Valley	Scott Anther	\$600
WTABrandon Beagis\$60WTAEric Counselman\$600WTAJohn Burge\$600WTAJohn Burge\$600MTAJohn Burge\$600MTAWTA\$500BayerWTA\$500BayerWTA\$100Bulls-Eye CCWTA\$1,290Cole Growers ServiceWTA\$500Creekwood FarmsWTA\$500MilorganiteWTA\$2,000Milorganite/ HorstWTA\$2,000Milorganite/ Wisconsin TurfWTA\$1,220National Products ResearchWTA\$500Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	WGCSA J.R. Love Scholarship	Mark Livingston	\$500
WTAEric Counselman\$600WTAJohn Burge\$600MTAJohn Burge\$600Iurf Research DonorRecipientAmountAqua AidWTA\$500BayerWTA\$100Bulls-Eye CCWTA\$1,290Cole Growers ServiceWTA\$500Creekwood FarmsWTA\$500MilorganiteWTA\$2,000Milorganite/ HorstWTA\$2,000Milorganite/ Wisconsin TurfWTA\$1,220National Products ResearchWTA\$500Northern Great Lakes GCSAWTA\$500Novartis/ FoxboroWTA\$110Novartis/ Pat NortonWTA\$180Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	WTA	Raechal Sager	\$600
WTAJohn Burge\$600Inrf Research DonorRecipientAmountAqua AidWTA\$500BayerWTA\$100Bulls-Eye CCWTA\$1,290Cole Growers ServiceWTA\$500Creekwood FarmsWTA\$500MilorganiteWTA\$2,000Milorganite/ HorstWTA\$2,000Milorganite/ Wisconsin TurfWTA\$2,000Milorganite/ Wisconsin TurfWTA\$1,220National Products ResearchWTA\$500Northern Great Lakes GCSAWTA\$500Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	WTA	Brandon Beagis	\$60
InterferenceRecipientAmountAqua AidWTA\$500BayerWTA\$100Bulls-Eye CCWTA\$1,290Cole Growers ServiceWTA\$500Creekwood FarmsWTA\$500MilorganiteWTA\$500MilorganiteWTA\$2,000Milorganite/ HorstWTA\$2,000Milorganite/ Wisconsin TurfWTA\$1,220National Products ResearchWTA\$500Northern Great Lakes GCSAWTA\$500Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	WTA	Eric Counselman	\$600
Aqua AidWTA\$500BayerWTA\$100Bulls-Eye CCWTA\$1,290Cole Growers ServiceWTA\$500Creekwood FarmsWTA\$500MilorganiteWTA\$2,000Milorganite/ HorstWTA\$2,000Milorganite/ Wisconsin TurfWTA\$1,220National Products ResearchWTA\$500Northern Great Lakes GCSAWTA\$500Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	WTA	John Burge	\$600
BayerWTA\$100Bulls-Eye CCWTA\$1,290Cole Growers ServiceWTA\$500Creekwood FarmsWTA\$500MilorganiteWTA\$2,000Milorganite/ HorstWTA\$2,000Milorganite/ Wisconsin TurfWTA\$2,000Milorganite/ Wisconsin TurfWTA\$1,220National Products ResearchWTA\$500Northern Great Lakes GCSAWTA\$500Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Pat NortonWTA\$180Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Turf Research Donor	Recipient	Amount
Bulls-Eye CCWTA\$1,290Cole Growers ServiceWTA\$500Creekwood FarmsWTA\$500MilorganiteWTA\$2,000Milorganite/ HorstWTA\$2,000Milorganite/ Wisconsin TurfWTA\$2,000Milorganite/ Wisconsin TurfWTA\$2,000Milorganite/ Wisconsin TurfWTA\$1,220National Products ResearchWTA\$500Northern Great Lakes GCSAWTA\$500Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Pat NortonWTA\$180Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Aqua Aid		\$500
Cole Growers ServiceWTA\$500Creekwood FarmsWTA\$500MilorganiteWTA\$2,000Milorganite/ HorstWTA\$2,000Milorganite/ Wisconsin TurfWTA\$2,000Milorganite/ Wisconsin TurfWTA\$1,220National Products ResearchWTA\$500Northern Great Lakes GCSAWTA\$500Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Pat NortonWTA\$180Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Bayer	WTA	\$100
Creekwood FarmsWTA\$500MilorganiteWTA\$2,000Milorganite/ HorstWTA\$2,000Milorganite/ Wisconsin TurfWTA\$1,220National Products ResearchWTA\$500Northern Great Lakes GCSAWTA\$500Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Pat NortonWTA\$180Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Bulls-Eye CC	WTA	\$1,290
MilorganiteWTA\$2,000Milorganite/ HorstWTA\$2,000Milorganite/ Wisconsin TurfWTA\$1,220National Products ResearchWTA\$500Northern Great Lakes GCSAWTA\$500Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Pat NortonWTA\$180Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Cole Growers Service	WTA	\$500
Milorganite/ HorstWTA\$2,000Milorganite/ Wisconsin TurfWTA\$1,220National Products ResearchWTA\$500Northern Great Lakes GCSAWTA\$500Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Pat NortonWTA\$180Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Creekwood Farms	WTA	\$500
Milorganite/ Wisconsin TurfWTA\$1,220National Products ResearchWTA\$500Northern Great Lakes GCSAWTA\$500Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Pat NortonWTA\$180Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Milorganite	WTA	\$2,000
National Products ResearchWTA\$500Northern Great Lakes GCSAWTA\$500Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Pat NortonWTA\$180Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Milorganite/ Horst	WTA	\$2,000
Northern Great Lakes GCSAWTA\$500Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Pat NortonWTA\$180Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Milorganite/ Wisconsin Turf	WTA	\$1,220
Novartis/ FoxboroWTA\$110Novartis/ James KrutillaWTA\$110Novartis/ Pat NortonWTA\$180Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	National Products Research	WTA	\$500
Novartis/ James KrutillaWTA\$110Novartis/ Pat NortonWTA\$180Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Northern Great Lakes GCSA	WTA	\$500
Novartis/ Pat NortonWTA\$180Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Novartis/ Foxboro	WTA	\$110
Novartis/ Ray SchmitzWTA\$40Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Novartis/ James Krutilla	WTA	\$110
Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Novartis/ Pat Norton	WTA	\$180
Novartis/ Scott SannWTA\$31ProGreen PlusWTA\$515	Novartis/ Ray Schmitz	WTA	\$40
	Novartis/ Scott Sann	WTA	\$31
Reinders/ Daconil WTA \$5,890	ProGreen Plus	WTA	\$515
	Reinders/ Daconil	WTA	\$5,890

WTA

WTA

\$1.000

\$500

Spring Valley

Standard Tar Products

Stevens Point CC	WTA	\$1,103
Turf Partners	WTA	\$153
WI Golf Course Superintender	nts Assoc. WTA	\$4,100
Wisconsin Sod Producers	WTA	\$875
Gary Zwerlein	WI Turfgrass Research and	d\$100
	Development Fund (WTR	DF)
Lake Wisconsin Country (	Club WTRDF	\$350
Mike Lee	WTRDF	\$85
Westmoor Country Club	WTRDF	\$2,690
WTA	WTRDF	\$29,560
Riverview Country Club	Noer Facility Computer	\$1,900

Another group of people also deserves thanks for the success of EXPO. They are the registration volunteers, turf student volunteers, and session chairpersons that help make the show flow smoothly. And of course the show would not be what it is without the group of dedicated attendees that brave the weather every year to get to EXPO.

The planning committee will be starting to organize next year's show real soon. If you have suggestions or know of a subject or speaker you would like to hear, then please contact one of us. We'd like to keep the educational benefits of EXPO at the highest level.

# Introducing Country Club<sup>2</sup>.

Country Club<sup>2</sup> contains short-chained water-soluble methylene ureas that deliver nitrogen consistently — even in sandy, low temperature or low moisture areas — providing up to 95% of its

nitrogen source in 12 to 16 weeks. That's because Country Club<sup>2</sup> doesn't rely on microbial action alone. It also releases nitrogen through controlled solubility in the presence of water. So it works efficiently in any soil type providing noticeable green-up within days and sustained feeding for weeks. For more information on Country Club<sup>2</sup>, contact your authorized Lebanon Turf Products distributor or call 1-800-233-0628.

Available in greens of fairway grades.

Ken Quandt Territory Manager Bettendorf, IA (414) 327-3993



## GOLF COURSE AND ATHLETIC FIELD MIXES

WOLOSEK

3531 Plover Road, Hwy. 54 East Wisconsin Rapids, Wisconsin 54494 (715) 423-3909 Fax (715) 423-4215

We have a COMMITMENT to the Professional Golf Course Superintendent and Maintenance Grounds Supervisors with these top quality products...



Our guarantee is that your product will be delivered to you at a scheduled time and affordable cost.



### **GOLF COURSES**

- Dry & Non-dry Topdressing Sand
- Dry & Non-dry 90/10, 80/20, 60/40 Topdressing Mix
- Construction Mixes
- Range Tee Mix
- Bunker Sand
- Cart Path Aggregate
- Top Quality Peat

### ATHLETIC FIELD MIXES

- Sports Turf Topdressing
- Infield Mixes

## Insects Are Too Fascinating to Bug Him



#### By Lori Ward Bocher

 $B^{\rm ugs}$  are getting more respect these days, from the environmental philosophy that we need to coexist

with insects and not wipe them out, to two new Hollywood hits, A Bug's Life and Antz. Phil Pelliterri, an insect diagnostician and distinguished outreach specialist with the Department of Entomology at the University of Wisconsin-Madison, is pleased with this elevated status for his favorite critters.

"From a biologist's perspective, insects dominate the world," he states. "There are so many different species. They've been around a lot longer than we have. If they're that successful, they must be doing something right. If you can take a

step back and get by that normal repulsion people have of insects, you can really admire them. They're absolutely intriguing the way they behave. You never run out of things to study. That keeps it fun."

And fun is what Phil Pelliterri has had on his job for the past 21 years. In a university environment where most people specialize, he is a generalist when it comes to insects. He's seen . . . and heard about . . . and lectured about . . . and answered questions about . . . them all – from crop, garden, turf and ornamental pests, to household varmints, to insects that drive humans crazy.

#### From garbage truck to lab . . .

Phil was born and raised in Madison, and he worked his way through school by driving garbage trucks for trash removal companies that his father and uncle owned. Rumor has it that watching bugs on garbage trucks led him to a career in entomology.

"Well, that's what I always tease people about," he admits. "To be truthful, I was studying biochemistry as an undergrad at the UW. And I took a course in entomology more as a curiosity, a fun course to take. It was just so intriguing that I immediately converted to an entomology major in my junior year."

Phil received his BS degree in 1975 and an MS degree in 1977 – both in entomology. At that time, the entomology department wanted to set up a diagnostic lab similar to the one in the plant pathology department. "The reasoning, among other things, was that the Extension people were always out in the field in the summer when people sent specimens to the lab. It



would take too long to get an answer, and some of the specimens would actually decay."

Dr. Chuck Koval offered Phil a threemonth position to run the lab for a summer. "Things went well, and there were more things to do at the end of the summer, so I stayed on. Slowly, but surely, they were able to keep it running. Last May, I completed my 20<sup>th</sup> year here," Phil points out.

He has full responsibility for the diagnostic lab. "I identify insects that come in from around the state," Phil explains. "The number of samples ranges from 1,300 to 2,200, depending on the year. Of those, about 60 percent come in from the

county Extension offices. We really try to promote that avenue first. We're more the backup."



Phil admits that most of the time he can identify the insects quite quickly. But there are times when even he is stumped. "Less than 1 percent of the samples I have to send off to the Smithsonian Institution in Washington," he points out. "They have 18 to 20 entomologists on staff, and all they do is identify insects. These people are world experts. They're our backup."

Phil also handles the general phone work for the department. "Last year I got just over 4,000 phone calls," he says, adding that it might be someone asking what bug they have or someone wanting to know about chemicals or the different aspects of pest control.

"In the summer, I don't leave the lab much. I'll average 50 to 55 phone calls and 15 to 25 specimens a day," Phil points out. "And in the winter, when things slow down in the lab, I do lots of lecturing and teaching on campus. I will admit that, by the end of summer, I'm sick of talking on the phone. But then I start teaching, so it's a nice transition. And when I'm sick of giving lectures, then it's about time to get back into the lab and do the phone work."

Officially, his position is 75 percent Extension and 25 percent teaching. He teaches a six-week course in the UW Short Course program, and he teaches environmental toxicology in a couple of courses.

#### Job brings variety . . .

"And I go out on the road doing Extension meetings," he continues. "One responsibility I've had for quite some time is with what we call 'structural pest control' – the cockroaches, ants and wasps. But, because we've been so short staffed, I've also been out on the road giving turf talks, woody ornamental talks, crop talks, tick talks. Over the years there isn't an area of entomology I have not given lectures on. But that keeps it fun. It's always changing. It's hard to get stale."

Phil has built quite a reputation for himself around the state. "Because I'm here running the lab, by default I often get an awful lot of press – TV, radio and newspaper," he explains. "Last year I did about 50 newspaper pieces, 40 radio shows, and 15 TV slots of one sort or another. So my name is sort of floating around out there. People see the name and chase me down. I even get calls at home."

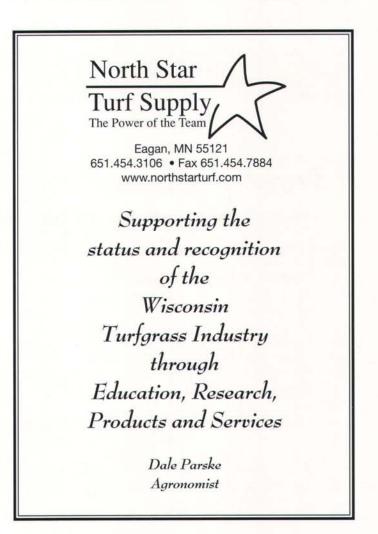
Luckily, Phil enjoys working with people. "Most of the people I deal with are interested in plants or the natural world to one degree or another, so there's kind of a common bond there," he points out. "And, over the years, I've seen an increasing appreciation of just how interesting and intriguing insects are. It's fun to share information with people who are interested in insects. It's also rewarding when I give people decent information that keeps them from spending money needlessly."

As an entomologist, Phil also works on homicides and law suits. It's amazing what secrets those insects can reveal! He's worked on a few autopsies of human bodies, including some murder investigations. "They call it forensic entomology," he explains. "Because of the way the insects attack dead bodies, you can time how long a body has been exposed by knowing what insects are on the body and how old they are. Maggots are the most important insect for this. They can use that evidence in determining time of death. It's interesting, but I won't say it's my favorite thing to do."

When insects show up where they shouldn't show up, sometimes it results in a lawsuit, and Phil is called in as an expert witness. "People laugh at us, but there are times when we are literally counting the hairs on the feet of certain insects to tell what they are. In these lawsuits, sometimes knowing exactly what insect it is gives us a hint of where it came from. That's what lawyers are most interested in – who's responsible," Phil says.

#### Sometimes the unexpected . . .

In January, he indirectly got a call from Hollywood. "A woman called who knew someone who knew me," he explains. "She had a daughter whose husband was doing a film in Hollywood. They were wondering what makes



crickets stop making noise. So we talked about that."

Then there are the crazy cases. "Once somebody brought me a piece of chicken and thought there were worms in it," Phil recalls. "It turned out to be the esophagus. If you look at the esophagus, it is ribbed, just like a worm. So it was somewhat valid.

"I've had people bring me samples of things they found in food that you could tell were planted in the food," he continues. "Once somebody supposedly found a whole earthworm in bologna. Well, bologna is cooked and that earthworm was not. There was a rumor that they were putting earthworms in bologna. I got a kick out of that because, at the time, earthworms were going for \$5 a pound and bologna for about \$1.50 a pound.

"There was one incident that was related to turf, although I was more on the sidelines for this one," Phil continues. "Two years ago when the Packers had to import sod for the NFC Championship game against Carolina, that turf had to come from the east coast which has infestations of Japanese beetles. So there was a real concern about bringing that insect into the state. The Department of Agriculture ended up doing the inspections, and they didn't find anything." There's another beetle that has entomologists sweating bullets right now – the Asian long-horn beetle. "That's an insect from China that was shipped to the U.S. on pallet wood," Phil explains. "There was a problem in New York about three years ago. Now, all of a sudden, it popped up in three sites in Chicago. It attacks maples, ash, locusts, poplar, elm. It just tears trees apart. Usually when insects attack trees, the trees have to be stressed or weakened. But this one doesn't seem to care."

#### 35 new insects in Wisconsin . . .

Since Phil started working in the diagnostic lab more than 20 years ago, he's seen lots of new insects enter the state. "I gave a seminar for the department last winter as I was getting close to my 20th anniversary," he recalls. "Without even trying, I came up with a list of 35 insects that weren't in Wisconsin when I started here 20 years ago. Some are turf pests, like the black turfgrass ataenius. It's a little grub that gets into fairways and greens and causes major problems by eating the roots off the plants."

There are other changes he's seen in 20 years. "We have seen somewhat more of a tolerance for this whole



# A longer, stronger chain of Command.



### FIVE NEW KOHLER<sub>®</sub> CS PRO ENGINES OFFER AN IMPRESSIVE LINEUP OF COMMAND PRO<sup>™</sup> POWER FROM 4 - 26 HP.

Easy starting. Longer running time. Quieter operation. More power. The KOHLER Command CS PRO 4, 6, 8.5, 10 and 12 HP engines offer versatility for virtually any application without sacrificing an ounce of dependability. Rugged, reliable power. We figured the best way to improve on perfection was to add more of it. From 4 - 26 HP, now Kohler offers a longer, stronger chain of command.

Call 1-800-544-2444, ext. AS1, for more information. www.kohlerengines.com



II SIL

idea of pest management and an understanding that not all insects are bad," Phil says. "From a biological standpoint, you're never going to win the war against insects. An 'us vs. them' philosophy is not going to get you very far. Between resistance and new insects and other things, if that's the approach you take, you're definitely going to lose.

"With environmental concerns and other things, we're seeing a change in attitudes," Phil believes. "Can we grow our plants differently to make them less susceptible to insects? Can we select varieties that are less susceptible? The whole philosophy is to coexist a little bit better and make wiser choices.

"Ultimately, what it comes down to is a better appreciation of the natural world and what kinds of balances we need to set up," he continues. "Twenty or thirty years ago, everybody thought we had a magic little chemical that would solve all of our problems. This is a major change – one that has made it more difficult, but is more biologically reasonable in the long run."

#### Bugs in a new light . . .

Perhaps it's this better appreciation of the natural world that has led to two movies about insects -A Bug's Life and Antz. Phil has seen the former, but is waiting for the video to come out to see the latter. "I'm pleasantly surprised with these movies," he says. "As a purist, an entomologist, I can sit back and say, Well, there's not enough legs or they got this wrong.' And there are a few of those mistakes. But, in general, a lot of what they do in the movies is biologically true. There are lots of little subtleties that I picked up on, so I know they did their homework.

"What I find even more intriguing is that they put insects in a different light," Phil continues. "When I do school programs to youngsters in the first, second or third grades, they're just amazed. I can blow their socks off with some of these giant beetles. Kids, for the most part, really appreciate insects.

"But, in our culture, as you get older, all of a sudden insects have all these weird connotations, like you're a poor housekeeper, things like that," he adds. "Usually they're not true – they're urban legends."

One of Phil's heroes is *The Far Side* cartoonist, Gary Larson. "He does neat stuff with bugs. He makes pretty good humor out of it and still is biologically true," Phil says.

Over the years, Phil has endured jokes and comments about his job. He's often called the Bug Man. "After graduating from garbage trucks, this is probably a step up," he laughs. "It doesn't phase me at all. And, as you can imagine, I have various little insects and insect pictures sitting around the house. That comes with the territory."

When he's out in public, people come to him with

their bug problems. "To be honest, the only people I don' like to answer are lawyers," he admits.

#### Lifelong native of Madison . . .

Phil has lived in Madison all of his life. He and his family now live 1-1/2 blocks from Odana Hills. His wife, Terri, is an occupational therapist who works in public relations for the Dane County Mental Health Association. Their daughter, Molly, is a freshman at the UW with plans of pursuing some type of science major. And their son, Nick, is 16.

Phil enjoys archery and bow hunting. "This works out pretty well because my work settles down a little in the fall so I can take time off to go throw sharp sticks in the woods," he says about his hunting. "I don't shoot at targets a lot, but my son and I do participate in archery events at the Badger State Summer Games. One of these days I'm going to catch up to him. He's won five metals and I've won three.

"I'm also involved with the Boy Scouts with my son," he continues. "This past summer we went on a twoweek back-packing trip in New Mexico and walked 70 miles."

And how many different species of insects do you think he saw on that hike?  $\checkmark$ 





By Dr. John C. Stier Department of Horticulture, University of Wisconsin-Madison

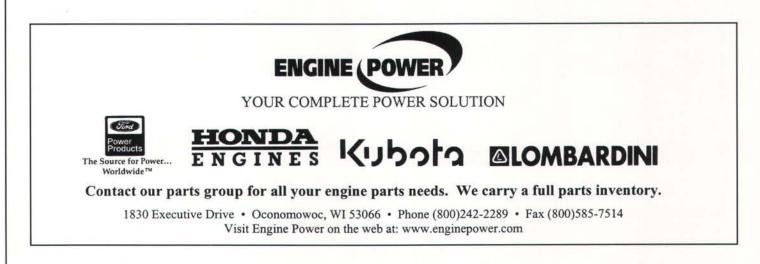
#### Scope of the U.S. turf industry

Have you ever stopped to consider how large and comprehensive our turf industry is? It may be larger than you think. Turf influences many lives, and in many ways. Components of the turf industry can be grouped into four branches: turf facilities, manufacturing, servicing, and institutions. Turf facilities is easily the most obvious of the four groups. In this group, most people would be quick to list golf courses and home lawns; sports enthusiasts would add athletic fields. How many people would include the other turfed areas which comprise most of the turf, including airports, cemeteries, rights-of-way, schools, parks, playgrounds, hospitals and other municipal/urban areas. The manufacturing branch is also fairly obvious and includes equipment, seed, sod, fertilizer, chemicals, irrigation, soil amendments, etc. The service group is less obvious to the lay person, but obviously known to turf professionals. This group includes architects and designers, consultants, dealers, publications, and organizations such as the Wisconsin Turfgrass Association. The fourth group, institutions, is perhaps the least obvious. Institutions in the U.S. play a vital role in education and research – included in this group are universities, vocationaltechnical schools, the USDA, and the extension service.

The last reliable estimate of the U.S. turf industry, using data compiled around 1990, provided a value of \$20-30 billion (Watson et al., 1992). Some of the data were derived using turf surveys conducted by individual state turf organizations. One example is the 1989 Ohio turfgrass survey. Annual expenditures in the Ohio turf industry were \$1.16 billion - by comparison, the total value of conventional agriculture expenditures was \$2.65 billion. Prior to the survey I think few people realized the scope of the turf industry. Other states have shown similar values: Pennsylvania, \$1.46 billion (1989), Kentucky, \$348 million (1989), and Michigan, \$1 billion (1988). In the 10 years since these surveys were conducted, the value of turf has only increased. Three years ago the value of the North Carolina industry was estimated at over \$2.5 billion based on an industry survey.

#### Why do we need a survey?

The marquee reason for conducting a survey is to determine the economic impact turfgrass has on our state. Private companies conduct market surveys to help sell product: we need a survey to sell ourselves politically. The recent Ag 29 ruling is a case in point. When a legislative decision had to be made regarding posting regulations, not only did the environmentalists show up in large numbers compared to the few for the turf industry, but the legislators have no idea of the significance of the turf industry to the state. When the Turf Council of North Carolina took the results of their survey to the state legislature in 1996, the legislature effectively told the group "Turf was insignificant, tobacco was king, tobacco was a \$1 billion a year industry in the state." When the legislature finally looked at the survey, they appear to have been jolted into action. In 1997, the state legislature appropriated \$250,000 for the



#### GAZING IN THE GRASS

TCNC (Claffey, 1998); in 1998, the amount rose to \$500,000. As we struggle to find dollars to conduct applied research for the industry. and struggle even harder to fund extension programs and publications to improve turf management practices, aid sound legislativedecision making, and educate the public, legislative support will be critical to the future of both the turf industry and university-based support. When we consider the number of turf equipment companies which have either headquarters or major manufacturing plants in Wisconsin, I'll bet we can show a value of over \$3 billion. Examples include Jacobsen/Textron, John Deere, Toro, Briggs & Stratton, and Kohler engines.

Having a document which describes the value of the turf industry is also needed for building support within the UW system. Currently one can find over one dozen researchers working on cranberries and another dozen working on potatoes at the UW, yet these industries generate less than \$600 million each year combined. One of the obstacles the turf industry faces is that it is not recognized as a commodity by the state or federal government, so government-funded surveys are not conducted (with the exception of the sod industry). Yet these same surveys show the value of the cranberry industry may be \$250 million, and this generates support for the industry. One of the major complaints I have heard from the industry since I have been in Wisconsin is the absence of a turfgrass pathologist at the UW. During a recent faculty meeting, two key faculty members of that department questioned the need to hire a turfgrass pathologist per se, with the underlying implication that the turf industry was not as important as small grains, for example. Dr. Chris Williamson, our new turf and ornamental entomologist at UW-Madison, has funding for only three years. The position, formerly held by Dr. Chuck Kovall, used to be "hard-funded." Again, we need to convince the university administrators of the importance of the turfgrass industry. Without a published survey, it is nearly impossible to build support for the turf industry.



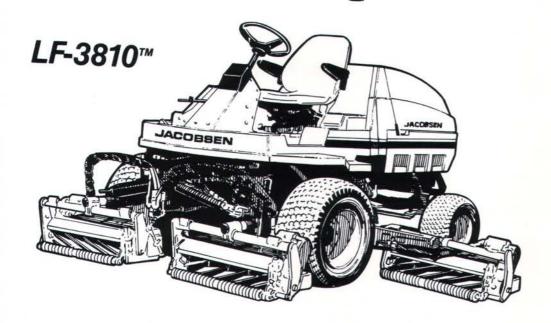




SV Utility Truck

JACOBSEN

11' CUT 50 HP. DIESEL ENGINE 4 WHEEL DRIVE ALL HYDRAULIC DRIVE NO BELTS NO PULLEYS



HR-5111™

5 OR 10 BLADE REELS 10' CUT 38 HP. DIESEL ENGINE 2 OR 4 WHEEL DRIVE

### WISCONSIN TURF EQUIPMENT CORP.

\*\*\*TWO LOCATIONS\*\*\*

1917 W. COURT ST. JANESVILLE, WI. 53547 608-752-8766 21520 W. GREENFIELD AVE. NEW BERLIN, WI. 53151 414-544-6421