

CHIPS & PUTTS

Founded in 1936

OFFICIAL PUBLICATION OF THE POCONO TURFGRASS ASSOCIATION

VOL. 4, NO. 4

GCSAA brings on-line learning to its members

EDUCATION - In January the GCSAA Board of Directors approved Pennsylvania State University's World Campus instruction for External Continuing Education units (External CEUs) credits necessary for certification or re-certification as a certified golf course superintendent.

Beginning July 1, 1998, GCSAA members can earn External CEUs and learn about turfgrass management or enrich their current level of expertise with Penn State's Turfgrass Management Certificate Program. This program offers classes from Penn State's widely respected turf-

PGA, Turner Sports sign new seven-year cable rights pact

Beginning in 1999 and continuing through 2005, Turner Sports will provide exclusive cable coverage of the season's final major championship. Its 18 hours of coverage will feature a Wednesday evening preview, live coverage of Thursday and Friday play from 1:00 to 7:00 P.M., and early coverage on Saturday and Sunday. The PGA Championship is golf's only major with live cable coverage during all four rounds.

The best vitamins under the sun

A German study determined that taking high doses of Vitamins C and E for several days before sun exposure can help lessen the severity of sunburn. For eight days, 20 subjects took either 2,000 mg of Vitamin C and 1,000 IU of Vitamin E, or placebo tablets. After exposure to ultraviolet rays, the C and E group developed milder burns. These vitamins may slow the oxidation damage that causes sunburn, says Richard Wagner, M.D., dermatologist at the University of Texas at Galveston. The combination provides an SPF of only 1.4, so topical sunscreen is still your best protection. Dr. Wagner advises that you consult your doctor before you take high dosages of C and E.

Meadowbrook makes splash in City of Brotherly Love

WEST CHEST, PA Meadowbrook Golf Group, Inc. is about the begin construction on a new upscale, dailyfee course. Tattersall Golf Club will be located 45 minutes from Philadelphia, ranked by National Golf Foundation as one of the most under-supplied golf markets in the country. The Rees Jones-designed layout will border an upscale housing project developed by Tattersall Development. The total development cost is estimated at \$10 million. **DEP** is serious about the December compliance deadline for underground storage tanks in Pennsylvania. How serious? They're prepared to issue fines of up to \$10,000 per day.

That was the message of a letter the PA Department of Environmental Protection (DEP) sent earlier this year to owners and operators of more than 25,000 underground storage tanks in PA. It was a reminder that they must upgrade their storage tanks, to meet new corrosion control and spill and overfill requirements, by December 22, 1998.

According to PA Environmental Reporter, an attorney with DEP has said, "The department is determined to enforce this deadline. We will be issuing orders, and we will be taking very strong enforcement actions...(regarding) this program, almost unheard of enforcement actions."

In this issue

- Dr. Dernoeden. New Generation Fungicides
- Upcoming Events



JUNE 1998

President's Message......

We are in the full swing of things as far as the golf season goes. Thunderstorms and members' complaints are moving in from day to day. I love this job!

A big thanks goes out to Jason Barndt, Golf Course Superintendent, and the staff at Berwick Golf Club for the great hospitality at last month's meeting. Great job, Jason!

I am sure Mark Eisele and his staff at Woodloch Springs are getting the course in shape for all of us for the June meeting. If you haven't played there yet, be sure to get out that day to experience all his fine work. This meeting will also include a qualifier for the PTC Tournament in October. Bring your "A" game that day. It is also time to dethrone Kelly Kressler and Tony Grieco. They have won at the last few meetings. Are you guys ready for a challenge?

Remember to pick up the phone and give your neighboring superintendent a call every once in a while. Our support for one another will get us through the next few months.

Hope to see a few lost faces and a few new ones at the next meeting!

Ronald C. Garrison, CGCS

From the Editor's Desk.....

I saw the movie Bulworth the other day. It was a sad commentary on our political system and life in general. This is not about movie reviews, but the commercialization of our industry. When did everything become about money? We complain when golfers demand more than what they are willing to pay for, yet we do it in our own industry. Every time we have an outing, my golf course looks like the side of the road during election time. My employees look like billboards for the chemical industry. I'm just waiting to sell advertising space on the equipment, like a Nascar. I guess what bothers me the most is the demands we put on our associations to provide more and more. The GCSAA has sunk to selling our course information (names, addresses, phone numbers, etc.) and every lunch, meeting, or golf event, just to keep up with the demands of its membership. I know that at this moment many of you are thinking there is nothing wrong with it as long as my dues stay low. The problem is all that money will eventually lead to corruption. I don't believe there is any in our association presently, but believe, as in every other industry, that it is inevitable. Don't we have enough shirts, hats, and pocket knives? Do we really need big money sponsors for every national event? Make your opinion known, or don't be surprised to see our GCSAA board candidates one day spending a million dollars on their campaigns and wondering how they can afford it.

Tony Grieco, CGCS



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1998 CALENDAR OF EVENTS

PESTICIDE CREDITS Eastern Pesticide Institute



The 8th Annual Pesticide Institute will be held at Lehigh University on August 11 and 12, 1998.

There will be three sessions each day:

August 11, 1998: 8:00 A.M. - Turf Track (Cat. 7 - 4 credits) 10:15 A.M. - Core Track (4 credits) 1:15 P.M. - Product Showcase (Cat. 6 & 7 - 2 credits each)

August 12, 1998: 8:00 A.M. - Ornamental Track (Cat. 6 & 23 - 4 credits) 10:15 A.M. - Core Track - 4 credits 1:15 P.M. - Industrial Weed/Right of Way Track - (Cat. 10 & 14 -4 credits)

Registration is a half hour before each track or you can pre-register any time before August 5. For more information or registration form, contact the Pennsylvania Landscape & Nursery Association.

Check out Golf Web Sites

The following is a sample listing of golf-related Web sites: American Junior Golf Association: www.ajga.org American Society of Golf Course Architects: www.golfdesign.org Club Managers Association of America: www.cmaa.org Eastern Amputee Golf Association: www.eaga.org Family Golf Association: www.familygolf.org Golf Course Builders Association of America: www.gcbaa.org Golf Course Superintendents Association of America: www.gcsaa.org National Golf Handicap Association: golfcap.com The Golf Channel: www.thegolfchannel.com Traveller Golf Information Center: www.traveller.com United States Golf Teachers Federation: www.usgtf.com Ladies Professional Golf Association: www.lpga.com PGA of America: www.pga.com, PGA Tour: www.pgatour.com United States Golf Association: www.usga.org

August 12-13, 1998 - Penn State Turfgrass Field Days

Joseph Valentine Turfgrass Research Center and Landscape Management Research Center, The Penn State University, University Park, PA 16802. Contact: Pennsylvania Turfgrass Council, P. O. Box 1078, Lemont, PA, 16851-1078, Telephone: 814-863-3475, Fax 814-863-3479, OR, Mr. George Hamilton, Department of Agronomy, 116 ASI Building, University Park, PA, 16802, Telephone 814-865-3007 or e-mail h8x@psu.edu.

June 15 - June 21, 1998

Lehigh Valley Open (Nike Tour) Center Valley Club - Stabler Center Telephone 1-888-873-5011

Officer, Director Nominations Open

MEMBER/CHAPTER SERVICES

-Nominations for the offices of president, vice president, secretary/treasurer and three director positions for the GC-SAA Board of Directors will be accepted through July 1. Nominations should be in letter format from a chapter officer and addressed to the nominating committee chairman in care of GCSAA. The nominating committee will meet in late July to determine the official slate of candidates.



Jim MacLaren 800-700-0018

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JOSEPH M. DUICH TURFGRASS ENDOWMENT

The purpose of this endowment is to provide monies for turfgrass research, education, and extension in the Center for Turfgrass Science. The initial principal of this endowment in excess of \$1,000,000 has been received by The Pennsylvania State University from royalties and gifts designated for the above -stated purpose in honor of Joseph M. Duich, Ph.D., Class of 1952 and 1957. Only endowment interest is used for support and expenditures of the interest are determined by the faculty and staff at the Center for Turfgrass Science.

The Center for Turfgrass Science involves a substantial group of faculty and support staff from many academic departments from the College of Agricultural Sciences. Laboratories and field facilities available for turfgrass research are among the best found anywhere in the world. The teaching facilities include well equipped, state-of-the-art classrooms and laboratories.

Penn State has one of the world's leading academic programs in turfgrass science. A majority of the world's golf courses employ turfgrasses developed at Penn State, and much of the contemporary turfgrass technology reflects the results of research conducted at this university during the past 65 years. Penn State has one of the few undergraduate turfgrass science majors and one of the prominent two-year technical programs in turfgrass management in the United States today. Many of the leading turfgrass professionals from around the world had their technical, undergraduate tard/or graduate training at Penn State.

Turfgrass research at Penn State encompasses all areas of turfgrass science, including turfgrass breeding and evaluation, pest management, soil fertility and modification, fate of pesticides and fertilizers, and athletic field characterization. The research covers many types of turfgrass management systems, from highways to home lawns to athletic fields to golf courses. The extension effort is utilized to disseminate this and other university research to the turfgrass industry.

The Joseph M. Duich Turfgrass Endowment is an integral source of funding of the Center for Turfgrass Science. The endowment provides financial support for today's turfgrass program and will continue to support the program for decades to come.

BROCHURE

Novartis has created a brochure that presents the benefits golf courses offer to the environment in terms that are friendly to the average person. It also discusses the use of pesticides in a positive manner. It is a non-promotional brochure put together as a service to our industry. If you would like a copy, they will be available at the next Pocono meeting. They are available in any quantity by contacting John Wendorf at 302-731-5616.



REMINDER!

Any member who has not mailed in his completed roster form please do so as soon as possible. If your information has changed since sending in your form, please call or mail in your changes immediately to Melinda (717-675-3800). The roster book is now in production and should be ready by late summer/early fall.

The New Generation of Fungicides of Microbial Origin

by Peter H. Dernoeden

now, most golf course Bv superintendents in the U.S. have applied or at least heard of the new fungicide Heritage®. What most people may not realize is that Heritage represents a new generation of fungicides, whose active ingredient was derived from a microbe. Use of natural products as fungicides, however, is not entirely new in the turfgrass market. Cycloheximide, which was sold under the trade name of Actidione®, was used in the 1960's and '70's on turf to control dollar spot, leaf spot and other diseases. Cycloheximide was a by-product in the production of the antibiotic streptomycin. Streptomycin was derived from the bacterium Streptomyces griseus. Cycloheximide was expensive to produce and could be phytotoxic to turf, thus its registration was withdrawn in 1981.

Fungicides of microbial origin can be produced by fermentation (i.e., growing large quantities of a desired microbe in an aerated vat) or the antifungal properties of the microbe can be identified and synthesized in the laboratory. Regardless of how the products are produced, they must undergo the same U.S. Environmental Protection Agency registration rigor that is required for all other pesticides.

Azoxystrobin. Heritage® represents a new class of chemistry referred to generically as beta-methoxyacrylates. The origin of the first identified compound (i.e., strobilurin A) was a fungus from the mushroom family named *Strobilurus tenacellus*. The common chemical name for Heritage® is azoxystrobin. The strobilurin-based not only does not control dollar spot, but it can actually enhance this disease. Hence, Heritage® must be tank-mixed with another fungicide whenever dollar spot is active.

Fludioxonil. Novartis recently registered Medallion® for use in

controlling Rhizoctonia disease in greenhouse crops, ornamentals and turfgrass. This fungicide also will be marketed as a pre-packaged mixture with Banner MAXX® under the trade name Foundation®. Medallion® and Foundation® will be sold under an experimental use permit in selected states in 1998. The common chemical name of Medallion® is fludioxonil. Fludioxonil is an analog of a natural product called pyrollnitrin. Pyrollnitrin is produced in nature by the bacterium Pseudomonas pyrociniua. As was the case with azoxystrobin, pyrollnitrin had to be stabilized to protect it from rapid solar radiation degradation.

Unlike azoxystrobin, fludioxonil is a contact fungicide. As such, its residual activity is relatively short-lived, and this is one reason why it will be offered in a prepackaged mixture with BannerMAXX®. Fludioxonil interferes with membrane transport processes in sensitive fungi. It is unclear whether this compound has single-site or multi-site activity. While fludioxonil has activity on summer patch and snow molds, its strength appears to be as a brown patch Helminthasporium leaf and spot fungicide. Early compound was stabilized by adding molecules to the structure to ensure that it was not rapidly broken down by solar radiation. Because the original compound was slightly changed in the laboratory, azoxystrobin is best described as a synthesized analog of a natural substance.

Heritage[®] can be taken up by roots and moved via the xylem throughout the plant. When sprayed on leaves, it penetrates and moves through the leaf, where some molecules enter the xylem and move upward in the plant from the point of uptake. Because Heritage[®] only moves upward from the site of uptake, it is not truly systemic and therefore it is best described as being an acropetal penetrant. The fungicide provides disease control by interfering with respiration of sensitive fungal pathogens. It blocks electron transfer in the cytochrome bc complex and thus it is single site specific. That is, it only blocks one biochemical event, which means that the probability for resistance to occur increases greatly when compared to compounds with multi-site activity.

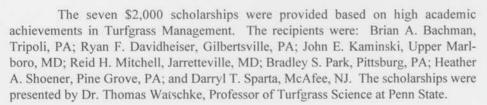
Heritage[®] is remarkably broad spectrum and is one of the few turf fungicides with a diverse target list, which includes both root and foliar pathogens as well as Pythium diseases. Its demonstrated target strengths include brown patch (and other Rhizoctonia diseases, such as yellow patch and zoysia patch), summer patch, take-all patch, anthranose, red thread. and Helminthosporium leaf spot. There is not a great deal of evidence, however, that it is as strongly effective against snow molds or Pythium diseases as it is against the aforementioned diseases. Heritage's® greatest known weakness is dollar spot. Its testing indicates that fludioxonil has curative activity, but generally performs better when applied preventively. Fludioxonil is the first contact fungicide to enter the turf market in over 30 years. Another interesting aspect of this product is that its residual activity is enhanced not only by mixing it with BannerMAXX®, but also by the regulator growth Primo® plant (trinexapac ethyl). When Primo® is applied a few weeks prior to the application of fludioxonil, the effectiveness of the fungicide is improved. Evidently, the reduction in clippings removal accorded by the use of Primo® keeps fludioxonil on leaves longer, thereby increasing its residual effectiveness.

Polyoxins. The "polyoxins" are a class of antifungal compounds produced by the fermentation of *Streptomyces cacaoi* var. asoensis. Polyoxorim is a fungicide (Continued on page 6)



PENNSYLVANIA TURFGRASS COUNCIL SCHOLARSHIPS AWARDED

The Pennsylvania Turfgrass Council has awarded scholarships to students majoring in the four-year Turfgrass Management Program at Penn State. The scholarships were presented at Penn State recently.



The Pennsylvania Turfgrass Council is a non-profit educational organization dedicated to the improvement of the turfgrass industry. Its intent is to organize all those in turfgrass into one strong organization that is representative of the entire industry. The Council has supported Penn State's program in turfgrass research, teaching, and extension since 1955. In return, personnel from the Penn State Turf Project have served as advisors for the Council.

(Continued from page 5)

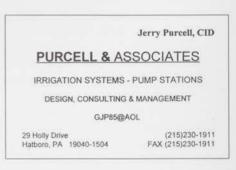
from this group (proposed trade name from PBI Gordon is STOP-IT), which was shown to be extremely effective in controlling brown patch at remarkably low rates. The status of polyoxorim and similar compounds for use on turf is currently unknown.

Summary. Hence, turfgrass disease management strategies have been expanded to include not only the direct application biological agents, but also the development of microbial-based analogs of naturally occurring, anti-fungal compounds.

Education Committee Update:

We are penciling in a Round Table discussion for July, so bring your opinions and your thinking caps. Keep your calendar open for September's meeting at Water Gap C.C. We are honored to have Dr. Bruce Clark as our guest speaker. Dr. Clark is always informative and entertaining. You won't want to miss this one. Stay well. Hope to see everyone real soon.

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A message from your golf course superintendent and GCSAA

1998 PTGA MEETING SITES

June 23, 1998 - C. C. at Woodloch Springs Host: Mark Eisele

July 7, 1998 - Shawnee Inn and C. C. Host: Steven Taggart

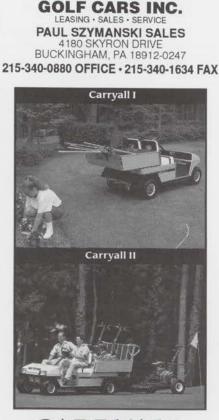
August 24, 1998 - Blue Ridge Country Club Host: Paul E. Weiss, Jr.

This month's speaker will be Dr. John Grande from Rutgers University. Dr. Grande will be discussing sprayer technology, so have your questions ready or no dessert! September 8, 1998 - Foxchase Golf Course (Joint Meeting with Central and Philadelphia)

September 28, 1998 - Delaware Water Gap Host: Charles LaBar

October 12, 1998 - Fox Hill Country Club Host: Ron Garrison, CGCS

October 19, 1998 - Philadelphia Cricket Club 22nd Annual Valentine Memorial Golf Tournament Call John Chassard for details at 610-967-4643.





MEETING NOTES.....SUPERINTENDENT PROFILE

We could not have asked for a better day at Berwick Golf Club for last month's meeting. The high heat and humidity forecasted for the day held off for 24 hours. Thank you to Jason Barndt and his staff for having the course in such great shape. While most of us were struggling to keep up with the rough, Jason had the whole course cut and trimmed for the Tuesday meeting. Also, we would like to thank the Chef and the kitchen staff for the good food and hospitality.

The results for the day's activities:

	hese guys	Tony Grieco & Kelly Kressler also won last month and Tony wo	n at the March
m	eeting. Or	e more win and they are banned fi	rom further competition!)
2nd P	lace	Steve Chirip & Tom Wojack	69 Net 66.2
3rd P	lace	Lee Kozsey & Tom Wilchak	70 Net 67
4th Pl	ace	John Spencer & Ed Keil	70 Net 67.9
5th Pl	ace	Fran Berdine & Paul Wickey	71 Net 68
Closest to the Pin #18		Steve Chirip	
Long Drive #13		John Gehman	

Congratulations to all the winners!

This month's meeting is at the Country Club at Woodloch Springs. The host Superintendent is Mark Eisele. He has been at Woodloch since 1991, taking over as Superintendent in 1993. He is a graduate of SUNY at Delhi. He is originally from the Hawley area. His hobbies include golfing, fishing and hunting. The course has bentgrass greens, tees and fairways. It was designed by Rocky Roquemore. It is an extremely challenging course, so everybody better bring their "A" game!



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POCONO ROUNDUP

NEWS AND VIEWS FROM THE POCONO TURFGRASS ASSOCIATION

Jonathan Suitch, formerly of Emanon C.C., has taken the position of superintendent at Bowling Green G. C. in Front Royal, VA. We wish him well.

Wood Stone C.C. in Danielsville, PA, is breaking ground for 18 holes.

Sand Springs is now open with all 18 holes. The local newspaper has called it "The Diamond in the Rough!" Congratulations to our own **Jim Kohler**.

Ray Masker is home and recovering nicely. Can't keep a good man down.

Gene Evans is in a rehab facility and by press time he should be home. He must have had a <u>long talk</u> with a guardian angel!

Summer Patch has a "Lip Lock" on your roots - should have treated by now !!

Crabgrass has all but germinated by now, the Pocono peddler ACCLAIMS.

It was a PINK spring. Pink Patch, Pink Snow Mold, and Red Thread. We were in the pink. Looked pretty for awhile.

Don't forget PSU Field Days, August 12-13. Call soon for room reservations so you will be close to "The Rat!!"



Leaves show backs before rain. They grow according to prevailing wind; a change of wind turns them over.

Birds perch before storms because low pressure air is less dense, making it harder to fly.

Cows tend to lie down in the pasture prior to their nap; that rain bull is flap!

Back on the Road again!





POCONO TURFGRASS ASSOCIATION 147 HAYFIELD ROAD SHAVERTOWN, PA 18708-9748

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