



CHIPS & PUTTS

OFFICIAL PUBLICATION OF THE
POCONO TURFGRASS ASSOCIATION

Founded in
1936

VOL. 4, NO. 9

DECEMBER 1998/JANUARY 1999

TURFGRASS WINTER STRESSES Other Than Snow Mold

By Dr. James B. Beard

Winterkill is a general term that encompasses all stresses that may damage turfgrasses during the winter period. It is important to properly diagnose the specific cause of winter injury in order to implement the proper practices that will minimize a potential reoccurrence in future winters. Low temperature kill and winter desiccation are the most common winter stress problems. The low temperature pathogens that cause snow mold diseases are additional major winterkill problems and will not be discussed in this particular article.

Low temperature kill. Both cool and warm season turfgrass species are subject to severe injury caused by low temperature kill. The extent of injury relates to the size of ice crystal formation within the plant tissues, which results in mechanical damage to the living portions of cells. The higher the water content of hydration level in the tissue, the greater potential for low temperature kill. Thus, any soil management or cultural practice – such as low cutting heights, high nitrogen levels, low potassium levels and/or impaired drainage – that increases the crown hydration level during the autumn hardening period will increase the proneness to low temperature kill. Contrary to widely published reports, it is essential to understand that high crown hydration is not a cause of winter kill, but rather a precondition that contributes to increase proneness to lethal injury.

Cold hardening. Turfgrasses have a natural ability to cold harden during the autumn decline in temperature that occurs prior to freezing, which is at temperatures between 35 and 40 degrees for cool season turfgrasses. Basically, cold hardening involves

physiological adjustments within the plant that maximizes the ability of the plant to survive low temperature stress. Two key physiological processes during this event involve the accumulation of carbohydrates, which in turn result in exosmosis, or the outward movement of water from the tissue. The more low temperature hardy species, such as creeping bentgrass and rough stalk bluegrass, have the capability to decrease their water content from 85% to the 65-70% range during cold hardening. Accordingly, one should select cultural practices during this cold hardening period that promote increased carbohydrate accumulation. These include an elevated cutting height and a low to moderate nitrogen fertilization program. Cold hardened turfgrasses typically have enlarged stem and crown diameters in the autumn due to the accumulation of carbohydrates.

Low temperature stress tolerance. Both turfgrass species and cultivars vary greatly in low temperature hardiness. Therefore, on sites subject to periodic low temperature stress, it is important to select cold hardy species as well as cultivars. Among cool season turfgrasses species, the perennial ryegrasses, tall fescues, and annual bluegrass are typically prone to low temperature kill. In contrast, roughstalk bluegrass and creeping bentgrass are excellent in low temperature stress tolerance followed by Kentucky bluegrass.

In this issue.....

- Calendar of Events
- Xanthomonas
- Treasurer's Report



President's Message.....

The two years as vice president flew by as Ron Garrison was running with the ball. Now it's been handed to me. I hope I can do as well as Ron. I want to thank Ron and all the Board members for their work and efforts in keeping the organization growing and going in the right direction.

Participation in the PTGA is a very important role for everyone, not just the Board members. I now you have heard it before, and you'll continue to hear it forever. We have several committees set up and are looking for your participation on these committees. The committees and their chairmen are listed elsewhere in this issue of *Chips & Putts*. Please give a call to the chairperson and volunteer time to help out.

We have had two Board Meetings since our annual meeting in October at Fox Hill Country Club. Tentative meeting sites for next year are slated. Watch for them and mark your calendars.

I would like to thank Tony Grieco for his fine job in making the transfer of the Secretary/Treasurer position a quick and smooth one. This position takes a lot of time and good pencil work.

The 1998 budget has been audited, and we're looking good, like a turf association should. We also have the budget set for 1999, and I'm happy to report we are in good financial shape.

I welcome Jason Barndt of Berwick C.C. and Darrin Batsky of Glen Oak C.C. to the Board. I see they are quick learners and are busy chairing their committees to bring you their information on membership, finance, scholarship and research. Gene Huelster of Pocono Farms C.C. is back with his education committee, and we can count on him for finding some of the best educational speakers for our meetings. Jim MacLaren will be busy editing our *Chips & Putts* and would have had this issue out earlier if he wasn't waiting for this article. Sorry, Jim! Anyone with stories, news or comments, please fee free to fax them to Jim. Tom Wilchak, VP, has got our golf program together for us and will be busy keeping me straight. Ron Garrison and Tony Grieco are our new GCSAA delegates for 1999. Mark Monahan

(Continued on page 4)



OFFICERS & DIRECTORS

1999

PRESIDENT

Jack Bird
The Hideout

VICE PRESIDENT

Tom Wilchak
Bethlehem Golf Club

SECRETARY/TREASURER

Tony Grieco, CGCS
Silver Creek Country Club

PAST PRESIDENT

Ron Garrison, CGCS
Fox Hill Country Club

DIRECTORS

Jason J. Barndt
Berwick Golf Club

Darrin M. Batsky
Glen Oak Country Club

Gene Huelster
Pocono Farms Country Club

Jim MacLaren
Turf Partners, Inc.

Mark T. Monahan, CGCS
Paupack Hills Golf & C.C.

CHIPS & PUTTS STAFF

EDITOR

Jim MacLaren
R.R. 1, Box 219
Harding, PA 19643
570-388-2889
Fax: 570-388-2167

EDITORIAL COMMITTEE

Sankey Brumley
Tony Grieco, CGCS
Doug Witcraft

Managing Editor,
Melinda Wisnosky

From the Editor's Desk.....

Welcome to either the last edition of 1998 or the first of 1999.

We will try to continue the tradition that was set by the re-founder of *Chips & Putts*, and by the 1998 editor, Tony Grieco, CGCS. Tony is stepping down to devote his time to the position of Secretary/Treasurer. He was also informed he has 27 holes to maintain, instead of 18.

Some major changes will be apparent. Things to look for will be a profile of the "New kids on the block", i.e., new superintendents who have accepted positions in our area; timely topics of some importance, a compilation of the PTGA board meeting and in conjunction with that, a brief overview of our financial condition to reflect the strength of the scholarship fund.

We may have a section entitled "Quotes of the Week", and we will have a section called "The Diary of a Greenskeeper", a poor soul scratching out a living in days gone by. Maybe a "Used Equipment for Sale" section, and a monthly section on weather.

That's enough for now. More later.

Jim MacLaren



1999 CALENDAR OF EVENTS

January 5-7, 1999

Eastern PA Turf Conference
& Trade Show – Valley Forge, PA
814-863-3475

January 7, 1999

GCSAA-Preventive Maintenance
Of Turf Equipment-Lake Harmony, PA
570-894-8055

January 8, 1999

GCSAA-Maximizing Teamwork
Lake Harmony, PA
570-894-8055

January 11-15, 1999

National Institute of Golf Management
Wheeling, WV
800-472-7878

January 12-13, 1999

GCSAA-Gold Greens History, Theory
Construction & Maintenance
Pittsburgh, PA
800-472-7878

January 12-14-19-21, 1999

Pesticide Short Course
Penn State Great Valley, Malvern
610-690-2655

January 19, 1999

Eastern Regional Landscape &
Nursery Seminar
Delaware Valley College
610-489-4315

January 28, 1999

Northeast PA Turf & Grounds
Maintenance School
Lake Harmony, PA
814-863-3475

February 1999

Industrial Right-Of-Way
Weed Control
Lancaster Extension Office
717-394-6851

To Be Announced

Turfgrass Management of Prof.
Penn State Great Valley, Malvern
610-690-2655

February 8-14, 1999

GCSAA Conference & Trade Show
Orlando, FL
800-442-7220

February 9-10, 1999

PA Landscape & Nursery
Conference
Harrisburg/Hershey
610-489-4215

February 16, 1999

Lawn Care Association of PA
Carlisle, PA
717-236-2050

February 17, 1999

1999 Winter Grounds Seminar
Kutztown Grange Hall
610-378-1327

February 23-25, 1999

Western PA Turf Conference
& Trade Show
Pittsburg Expo Mart
814-863-3475



EarthWorks

Natural Organic Products
P.O. Box 278K • 6574 S. Delaware Drive
Martins Creek, PA 18063
610•250•9650
Fax: 250•7840
soilfirst.com Joel Simmons

800 • 732 • TURF

The Scotts Company

and Subsidiaries



Fran Berdine

Executive Technical Representative

The O.M. Scott & Sons Company
Professional Business Group
199 Warn Avenue
Pine Bush, NY 12566
Telephone: 914/361-4105

1000 Springbrook Avenue
Moosic, PA
18507
800.650.1936

LESCO™

4217 Fritch Drive
Bethlehem, PA
18017
610.866.6665

Don Liprando

Turf & Ornamental Specialist

LESCO, Inc.
911 Fox Lane
Mountaintop, PA
18707

717.868.3592
610.778.4003 Pager
717.868.3597 Fax

CENTURY RAIN AID

Your Link to Legacy Golf Irrigation Systems



LEGACY™
GOLF IRRIGATION

CENTURY GOLF PROFESSIONALS
NEW JERSEY/PENNSYLVANIA
PHIL DEMARCO • 800-642-3706
VALENTINE & SONS • 610-525-5710

Call today for an
on-site consultation.

PTC PHILADELPHIA TURF COMPANY
4049 LANDISVILLE ROAD, BOX 865
DOYLESTOWN, PA 18901-0865

TURF EQUIPMENT
IRRIGATION EQUIPMENT & DESIGN SERVICES
FLOWTRONEX/PSI PUMP STATIONS
OTTERBINE AERATORS

OFFICE # 215-345-7200
FAX # 215-345-8132
TIME SAVER # 215-348-4314

**PARTS
SALES
SERVICE** 

ROSTER BOOK UPDATE

When you receive your dues invoice for 1999, you will also receive an update form for the 1999 Roster Book. If you have any changes from 1998, or if your information was incorrect **YOU MUST** give us the proper information. Melinda is not a mind reader.



XANTHOMONAS

(Biological Poa Annuua Control)
Update from Pennsylvania

With the trepidation of salespeople, that maybe we missed the climatic window of opportunity to apply the X-PO in the fall of 1998, Mr. John Doyle from EcoSoil (San Diego) arrived in Pennsylvania (October 20 and 21) to ascertain the situation.

The initial X-PO applications were made starting on September 8, and continued for the six week period, with the final applications made on or about October 22. During this period, frost was occurring on various sites, so obviously the 65-85 degree window was not there. Did this have an effect?

Visual symptoms were observed, maybe by wishful eyes, but the final determination had to be made by a laboratory analysis. Samples were taken from the areas treated with X-PO and shipped overnight by Mr. Doyle to the lab in San Diego to be cross sectioned to look for infection. On October 26 the laboratory called to report that indeed "streaming" was observed in ALL samples, some more than others. This showed that infection had occurred. A quantitative determination could not be made, but since infection had occurred, it would lead one to believe that while the plants were infected, they would not be healthy nor none competitive. Advantage – Bent!

What does this hold for the future? The laboratory will culture these samples and see if indeed demise of the poa annua will occur over time in a controlled environment. Alette will be applied to the samples to cause the infection to cease, if some so desire. Also, during Mr. Doyle's visit, we met with Mr. Dennis Watkins from DCW Consulting & Sky Bit Weather Service to determine when the proper climatic application window is for various sites in the country and how that correlates with information that pertains to X-PO's activity. It is possible in the future each site receiving X-PO will receive a detailed graph showing when the ideal window is for the application for maximum infection.

What was accomplished? First off, by meeting with the end users, we were able to get first hand information on what they had done during the applications and how it was applied. Secondly, we were able to see in the field what symptoms were observed. Thirdly, we received valuable information from the end users on when they wanted the demise to occur as it correlates with their various management strategies. Most agree that with proper timing and management, this is a tool that works!

All in all, it was a valuable experience for everyone. Infection of the plants has occurred. This is what we were after, and it was successful. Maybe we can do better in 1999.

(Continued from page 2)

and Gene Huelster will be keeping us up to date on what is happening with the Allied.

There is much more going on, and I will do my best to keep you informed. Should anyone have any questions, please give me a call or other members of the Board, and we will do the best we can to give you an answer. I hope to see everyone in the near future. I hope you had a Happy Holiday Season.

Jack Bird

TIPS ON SNOW SHOVELING

- Take it slow!
- Lift small amounts, especially the slushy stuff
- Use proper posture: keep a straight back and lift with your legs.
- Stop if you feel pain or fatigue.
- Tell your wife to finish.



GREY LEAF SPOT

A Synopsis of Dr. Bruce Clark's
Talk at the NJ Expo:

Grey leaf spot was first observed in this area in 1991. It was identified as far north as Massachusetts and New Hampshire in 1998.

It seems to be more severe:

- After drought conditions, then periods of high humidity and temperature (70-80 degrees)
- On taller turf
- On more frequently mowed turf
- On turf where clippings are not removed (Diseases reduced 50% if clippings are collected)

Recommendations:

- Keep fertility levels low in July and August
- Give adequate fertilizer after high pressure period.

 **NOVARTIS**

Bringing you the finest in turf management products including:

Barricade®

Primo®

Banner Maxx®

Sentinel®

Subdue Maxx®

John Wendorf
Tel 302-731-5616
Fax 302-731-5606
john.wendorf@cp.novartis.com

Check out our website at
www.cp.us.novartis.com



TREASURER'S SUMMARY REPORT

Financially, 1998 was the best year ever for the Pocono Turfgrass Association. This was due in large part to the budget the Board received last year, which was the best ever. Most important, however, was the continued support we got from our membership in dues, meeting attendance, advertisements, sponsorships and donations. We currently have over \$7,000 in our checking account and over \$6,500 in a CD. Because of the \$10 dues increase in 1999, our CD will be worth over \$8,000 by spring. Congratulations everyone, not only are we the best looking association, but financially sound as well.

So why did we need a dues increase, you ask. In the past, this Association has done it's best to support our industry with scholarship and research donations. Because of the limited funds we had available, this support had very little impact. It is the intent of this Board to build up our investments to the point that our interest alone can sustain a substantial scholarship while we continue to support research that impacts our area. In the past, donations came directly from our operating money. The only way to increase it was to tap our members and frankly, our members felt tapped out. Fortunately, when we went to the well once more, you responded generously, by accepting the \$10 increase. This money will go directly into our investments until such time that we can sustain our scholarship from interest. We will then have to make a decision to continue to increase the scholarship or lend additional support to research. Won't that be a refreshing change.

As your Treasurer for 1999, I have provided the Board with a financially responsible budget. If all goes well, I hope to continue the trend set by my predecessor and have nothing but good news to report financially throughout the year. •

JACK PATTERSON SCHOLARSHIP

The Jack Patterson Scholarship is awarded annually to a second-year student in a two-year program, or to a final year student in a four-year program or graduate school. One applicant is chosen for the \$500.00 scholarship and also is awarded an honorary membership in the Pocono Turfgrass Association for that calendar year.

The requirements necessary for consideration are:

- The applicant must be a second year student in a two-year program or in the final year of a four-year program or graduate school.
- The applicant must submit in writing why he or she feels that he or she should be considered for the scholarship.
- The applicant must include what he or she feels his future plans of contribution to the field of Turfgrass will be.
- The applicant must submit a letter of endorsement from his employer in the Turfgrass field. This endorsement can also come from former employers in the Turfgrass field.
- The applicant's request and letters of endorsements must be received together by April 15, 1999 for consideration.

Send requests to:

Jason Barndt
Scholarship Chairman
P. O. Box 1484
Albrightsville, PA 18210

THE WEATHER FEATURE DCW Consulting & Sky Bit

Weather conditions for 1998 greatly affected the success or failure of many routine golf course maintenance activities. Attempts to compare seasonal differences are best related by evaluating weather variables. The most effective approach is to relate growing degree-days during the season. A typical growing season is from April 1 through September 30. Knowing degree-day accumulation during this period allows one to compare seasonal variations. 1998 was an atypical year. Seasonal degree-day differences were consistently above normal throughout the summer.

Crabgrass germination, disease development, and insect development all were impacted by above average high and low temperatures. It is easy at this time to reflect on these variances. However, it is much more important to know during the season how these temperature differences are effecting daily management records of weather variables is the foundation of IPM management. Using this information properly allows the manager to anticipate problems rather than to simply react to problems.

The gray leaf spot epidemic on perennial ryegrass that we saw develop this year was a good example of anticipating a potential problem. Weather records of 1995 were compared daily to 1998 weather variables. Not only did conditions meet similar conditions of 1995, temperature averages exceeded those conditions of 1995. Gray leaf spot is a temperature dependent disease. The results of these developments during the season indicated that gray leaf spot would be severe and the onset of the disease would be much earlier than in 1995. This event was predicted by **Sky Bit** in early August and the forecast was accurate.

The potential to improve the way we deal with weather conditions continues to evolve. We cannot change the weather, but we certainly have the tools to better understand it. •



Do You Remember?



Black and white TV; when penicillin cured most sexual disease; TV Dinners; TV trays; Hula Hoops; Slinkies; when people married first; when closets were for clothes – not coming out of; 45, 78 & 33-1/3 records; nickel ice cream cones; penny postcards; made in Japan was junk; gas at \$.25 a gallon; Coke for drinking; pot for cooking; AIDES worked in hospitals.

Do you have trouble with guys who wear earrings, stuff called software, hardware, main frame, internet, yogurt and condominiums.

If you do, you should be contemplating retirement!

FROM A NON-SMOKER TO A SMOKER

Cigarette smoke is the residue of your pleasure. It pollutes the air, contaminates my hair, and dirties my clothes, not to mention what it does to my lungs.

IT TAKES PLACE WITHOUT MY CONSENT!

I have a pleasure also; I like a beer now and then. The residue of my pleasure is urine. Would you like, without my consent – well I think you get the picture!

Thank you for your understanding!

BOTANY LESSON

By Dr. Joe Vargas

He asked, "Can a plant live longer without air or without water?" He got no response, so he said, "Hold your breath while I go for a glass of water!"

GOLF CARS INC.

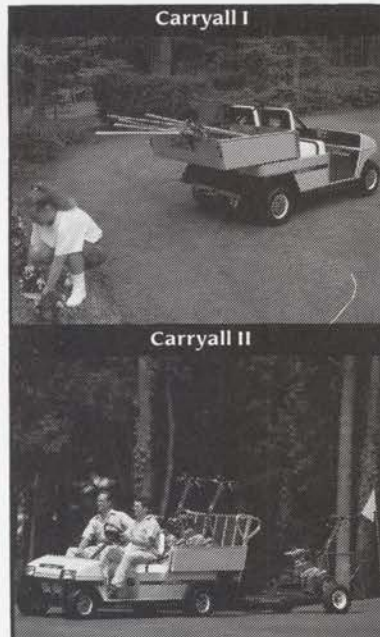
LEASING • SALES • SERVICE

PAUL SZYMANSKI SALES

4180 SKYRON DRIVE

BUCKINGHAM, PA 18912-0247

215-340-0880 OFFICE • 215-340-1634 FAX



CARRYALL
DRIVE IT TO WORK. Club Car



SEAN P. CULLEN
Territory Manager

CHARLES V. MCGILL, JR.
Director of Sales and Marketing

STULL EQUIPMENT COMPANY
Turf & Industrial Division
201 Windsor Road
Pottstown, PA 19464

610/495-7441
800/724-1024
FAX 610/495-7510

Jerry Purcell, CID

PURCELL & ASSOCIATES

IRRIGATION SYSTEMS - PUMP STATIONS

DESIGN, CONSULTING & MANAGEMENT

GJP85@AOL

29 Holly Drive
Hatboro, PA 19040-1504

(215)230-1911
FAX (215)230-1911



Dean Snyder
President

Egypt Farms, Inc.

P.O. Box 223
White Marsh, Maryland 21162

Phone: 800-899-7645
Local: 410-335-3700
Pager: 800-705-0430
Fax: 410-335-0164

AQUARIUS
IRRIGATION SUPPLY, INC.

**CUSTOMER SERVICE IS
OUR #1 PRIORITY**
PA 1800-989-7374
NJ 1800-922-0717

**Llewellyn
& McKane Inc.**
Manufacturers of Fine Printing

31 Hill Street, P.O. Box 507
Wilkes-Barre, PA 18703-0507
570-822-8181
FAX: 570-823-3579

- Layout and Design
- Typesetting
- Mac/IBM desktop publishing interface
- Laser color separations
- Scitex® electronic photo retouching
- Full electronic prepress services
- Foil stamping, embossing
- Complete bindery including saddlestitch and perfect binding

It's every player's responsibility...

- Repair ball marks
- Replace or fill divots
- Rake bunkers



A message from your golf course superintendent and GCSAA

SEASON'S GREETINGS

From

THE PTGA BOARD OF DIRECTORS.

YOUR SUPPLIERS & SUPPORTERS OF THE PTGA

AND THE STAFF OF THE "CHIPS & PUTTS"

OFFICE (800) 338-1466
HOME (610) 381-2504
FAX (717) 646-5840



PAR-MAR CARS, INC.
USED GOLF CARS & TURF EQUIPMENT
TURF SUPPLIES
ALASKA STOKER STOVE DEALER

1 KUKENBEAKER ROAD
P.O. BOX 68
LONG POND, PA 18334

MARK B. BIERY

MEETING NOTES.....Results of the Fox Hill Meeting

Before we get to the nonsense of awarding the golf prizes to those who win all the time anyway, we must reflect on the venue on which the contest was played and those involved in its preparation.

First and foremost our thanks go to Carmen Montagna who is the Chairman of the Green and the man who keeps the ship afloat. The ship, our own Ron Garrison, CGCS, who had the course in championship condition, (the greens were like a baby's keester), to his first mate Bobby Brown, who I am sure is going through the learning experience of a lifetime. Also, all the support people at Fox Hill C.C. From the Pocono Turfgrass Association, we THANK YOU.

Net:

Ryan Rockovits	68	Charlie McGill	73
Rich Pany	69	Mark Reed	73
Fran Berdine	71	Rich Patterson	73
Kevin Givens	71	Gene Huelster	73
Dave Huttie	72	Chris Givens	73

Gross:

Tony Grieco	76
Ron Wilchak	83
Kelly Kressler	86
Mike Cherinko	86

Closest to the Pin:

Tom Weinert	#3	21'4"
Mark Eisele	#7	7'0"
Kevin Givens	#11	3'8"

Longest Drive:

John Downer #16 344 yards



Plant Nutrients

The Fertigation Specialists.

Moyer & Son is the region's leading supplier of fertigation systems and liquid fertilizer for the golf course industry.

If You're considering fertigation at your club, make sure to put us on your short list!

800-345-0419
(215) 723-6000

113 E. Reliance Rd. Souderton, PA 18964-0198
FAX (215) 721-2800

1999 PTGA MEETING SITES

The first meeting of 1999 will be held at Silver Creek Country Club with Host, Tony Grieco, CGCS. Details will follow.



POCONO ROUNDUP

NEWS AND VIEWS FROM THE POCONO
TURFGRASS ASSOCIATION

OBSERVATION

*from Bill Brooks, Superintendent
Hanover C.C.*

On FAST Greens! Algae infested greens roll fast and dead greens roll even faster! Make sure there are no green patches in between to deflect the golf ball.

COMMITTEE ASSIGNMENTS

Education	Gene Huelster
Publicity/Editorial	Jim Maclaren
Golf	Tom Wilchak
Sergeant of Arms	Darrin Batisky
Finance/Fundraising	Jason Barndt
Membership	Darrin Batisky
GCSAA Affairs	Ron Garrison, CGCS
Social/Welfare	Gene Huelster
Bylaws	Ron Garrison, CGCS
Government Relations	Ron Garrison, CGCS
Scholarship & Research	Jason Barndt
Nomination & Long Range	Tom Wilchak
Allied of PA	Mark Monahan

ODE TO AERIFYING

Round and round the greens we went,
Now all of our energy is spent.
Thousands and thousands of little holes,
Resembles the work of tiny moles.
It had to be done so we all lent a hand,
Tomorrow they will be filled with Evans & sand.
In a week or two they will be back as new
And we will all take a break and enjoy a brew.
Soon the snow will be covering the ground,
And we all will take a vacation and won't be around.
Then March will arrive with the sound of a wren,
And we will all be back to do it again!

WELCOME NEW MEMBERS

The following have applied for and been accepted as members of the Pocono Turfgrass Association:

- Bennett Wartman** – Farm & Golf **Ron Martin** – Shawnee Inn &CC.
Jeff Flamish – Paupack Hill C.C. **Alex Stoy** – Pocono Farms C.C.



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

POSTAGE

NAME & ADDRESS

ADDRESS CORRECTION REQUESTED.