



# THE NEWSLETTER

Golf Course Superintendents

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June 1999

## After a 47-year career, Paul Brooks wonders “Where did all the time go?”

Paul Brooks is retiring. He’s going to do a lot of fishing, a lot of golfing. That’ll come in July when he rings down a 47-year career as golf course superintendent at the same course, the Sagamore Springs Golf Club.

Right now, though, he’s doing a lot of reminiscing and into thoughts like, “Where did all that time go?” That’s a part of the mystique of retirement. You can’t believe the best working years of your life are behind you.

The bond between Brooks and Sagamore Springs is unique because Paul has had no personal relationship with any other golf course in his soon-to-be 65 years on this planet. He caddied at Sagamore Springs; he played there and wound up working there.

“I remember the first day I saw the course,” Paul dipped into his memory files. “It was 1944 and I was 10 years old. We lived in Danvers and the golf course

was in Lynnfield. I was going to caddy for my father, so we both rode our bikes there. It was my first experience with golf, and I was caught up in a state of amazement. I’ve relived that scene many times. From that first day all I wanted to do was be around golf.”

Caddying and Brooks worked into a good mix. For the next six years he carted bags at Sagamore Springs and developed into a pretty good player while doing it. “I had a caddy swing,” he told. “And I really enjoyed the chance to play in between my caddying jobs. Again, it gave me the opportunity to be around the golf course. It was an atmosphere you couldn’t match anywhere.”

When Paul was 16 and in the middle of his formative years in high school, he approached one of the owners of the public course and asked for a job. He succeeded and became a member of the maintenance crew. Obviously, he was a member in good standing, too, because two years later he took over as the head golf course superintendent.

“I know that it sounds unusual for someone with no formal turf education to

take on all that responsibility,” Brooks explained. “But I was very attentive to what had to be done in the maintenance side of the game and I sought help from anywhere I could find it.

“In, fact, much of my turf maintenance training came in rap sessions. I remember talking for hours with such superintendents as Arthur Anderson and Phil Cassidy. Those two gentlemen never tired of discussing methods and other aspects of the maintenance program. So, in a roundabout way I guess you’d have to say I’m a self-taught superintendent. I picked up a lot by observation when I was working on the crew and expanded on it by picking the brains of such knowledgeable people as Anderson and Cassidy.”

Brooks didn’t confine himself to the superintendents’ field in getting more strongly attached to golf. One of his earliest friends in the game and eventual confidant is George Apple, the venerable former Sagamore Springs head professional.

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**“There wasn’t a morning when I got up that I didn’t want to go to work. When you leave a job in that frame of mind, you know that your life’s been fulfilled.”**

**Paul Brooks**  
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"George and I had, and still have, a great rapport," Paul said. "We used to talk all the time about things in general. But most of the time we'd come back to golf. I really don't remember how long he was at Sagamore Springs before he retired. However, he remains a mountain of a man there. He's 88 years old and he still walks the course.

During Brooks' tenure as golf course superintendent, Sagamore Springs developed into one of the best and busiest public courses on the North Shore. The course, founded by three different families, is now owned by one. Built in 1929, Sagamore Springs thrives under the leadership of corporation president Chris Luff.

"The golf course has improved with time, hands-on ownership, and plain dedication by all involved in its operation," Paul explained. "It's built a reputation to the point where 50,000 rounds a year are the norm. We've all grown together, it seems. The Luffs are great people to work for and work with. Somehow I have a feeling of fulfillment for having been part of the scene there."

Paul and his wife, Merry, live in Boxford and have had a fulfilled life of their own, having brought five children into the world. They do a lot of house fixing and gardening in their spare time and are looking forward to that day (July 31) when Paul not only can stop and smell the roses but try his hand at picking them, too.

"That's all right for me," Paul remarked. "But the Sagamore Springs connection still lives. Merry takes tee times there and she's going to continue to work the job while I do some heavy looking on. I really don't envision myself being too far away from the course. Maybe I'll try to get that caddy swing back and get into the easier part of golf."

Regardless, the Brooks touch won't be missing from the superintendent's schedule.

"That's right," Paul piped. "My brother, Donald, is taking over for me. He's been my assistant for the last 30 years and he's a logical choice to succeed me. After all, he knows where everything is."

Just as Paul Brooks knew where his life would lead him after that first day caddying at Sagamore Springs 55 years

ago. From that moment he and the Sagamore course became bosom buddies. And they remain so till this day.

"There wasn't a morning when I got up that I didn't want to go to work," Paul concluded about the Sagamore Springs bond. "When you leave a job in that frame of mind, you know that your life's been fulfilled."

**GERRY FINN**

## Calendar

- June 8 **Pro/Media/Superintendent Tournament**  
Owl's Nest Golf Course  
New Hampshire
- June 14 **GCSANE Monthly Meeting**  
Hickory Hill Golf Course  
Methuen, Mass.  
Team of Two Championship  
Supt. - Eric Brox
- June 23 **UMass Turf Field Day**  
South Deerfield, Mass.
- July 12 **GCSANE Monthly Meeting 75th Anniversary Tournament**  
Marshfield Country Club  
Marshfield, Mass.  
Supt. - Bob Matthews, CGCS
- August 9 **GCSANE Monthly Meeting**  
Poquoy Brook Golf Club  
Lakeville, Mass.  
Individual Championship  
Supt. - Mike Cummings
- August 11 **Athletic Turf Field Day**  
Nashua, N.H.
- September 21 **GCSANE Monthly Meeting Joint Meeting with Rhode Island**  
Quidnesset Country Club  
North Kingston, R.I.  
Supt. - Dean Ricci
- October 7 **GCSANE Monthly Meeting**  
White Cliffs Country Club  
Plymouth, Mass.  
Supt. - Lianne Larson
- November 1 **GCSANE Monthly Meeting**  
Brae Burn Country Club  
The Highland Course (9 Holes)  
Supt. - Bob DiRico, CGCS
- November 16 **GCSAA Seminar**  
Human Resource Management  
The International  
Bolton, Mass.
- November 17 **GCSAA Seminar**  
Budgeting & Forecasting  
The International  
Bolton, Mass.

# The Super Speaks Out

**This month's question:** *What about this myth that nine-hole courses are easier to take care of, and how does it compare with an 18-hole job?*

**Pat Daly, Milton-Hoosic Golf Club:**

"I don't know where the idea of working on a nine-hole course is easier than 18 came from, but I do know that I have to put up with double the traffic on my fairways and greens. That can only mean that I also have to live with more wear and tear on them. If that makes it easier, I don't know where that talk's coming from.

"Fortunately for me, I have a good background for maintaining a course, whether it's nine or 18 holes, because I worked under a top notch superintendent, Mike Iacono, when I was with him at Pine Brook. The time I spent there was a big plus.

"Regardless, this is a great experience for me, a real challenge. First of all, the greatest stress at a nine-hole course is on the greens. They take a beating because of the constant pounding they absorb through balls hit to the putting surface, players walking on them, and the fact that they are the climax of each individual hole. And, just to rub it in, my greens are on the postage stamp size scale.

"With this in mind, changing cups becomes more critical than at an 18-hole course. We change the cups here four times a week - Tuesday, Thursday, Saturday, and Sunday. I have a very strict fertilizing program for the greens, too, since they have to be as healthy as possible to handle the traffic.

"I have a crew of six people and myself, two year-round workers and four part-timers. I suppose that's about average for a nine-hole course, but again, because of the heavy strain on a concentrated area of turf, the crew is out there working to keep ahead of potential damage.

"There is one advantage here that boosts the confidence level of myself and my crew. We have only 10 golf carts and that cuts down on the possibility of trouble spots around the greens and tees. Milton-Hoosic is definitely a walker's course. It's also a good course, good enough to be a site for the state amateur qualifying this year. That's as hard as it gets."

**Fred Murray, Maynard Country Club:**

"Right off the bat, I have to say that a lot of my success, if there is any here, can be traced back to what I learned under Dan Higgins at Winchester C.C. In fact, I've tried to emulate what he does there in his maintenance program. Certainly, the time I spent with him got me well prepared for taking on the responsibility of my own job.

"With that said, I might add that the old saw about a nine-hole course being easier to groom than an 18-hole course probably runs under the heading of old wives' tales. All I can say to that is the comparison boils down to the fact that at a nine-hole course the superintendent has to do the same job (getting the course in peak condition) with half the money and half the people.

"Granted, you also can say that the nine-hole superintendent has half the amount of turf to condition. However, it really doesn't make much difference about degree of difficulty. Turf is turf and we have to control its life span as well as its health level.

"Naturally, there's more traffic on our course. Right now we're averaging about 25 to 30,000 rounds a year. I would guess that anything in that area is enough for Maynard to handle. My crew is normal sized. I have an assistant, a mechanic, and six seasonal workers. And we have enough work here to keep all of them and myself busy.

"The only special handling conditioning program I have is to make sure the areas where players walk from greens to tees gets a lot of attention. For me, those are the areas that take more than their share of beatings. Other than that, I use my HydroJect more often than normal; don't aerate any more than I would on an 18-hole course, and like the saying goes, hope that the weather and other uncontrollable elements cooperate with my efforts."

**Rich Arzillo, Unicorn Golf Course:**

"This is my 15th year at Unicorn and I'm just as enthusiastic about the job as the day I started. I don't know how to explain my zest for the job, but I'm beginning to think most people look at me as an institution around here.

"I'm as busy here as I would be at any other course, nine, 18, 27 holes. You name it. I wear a lot of hats because I'm in charge of all the buildings and also have a par-three course (Stoneham Oaks) to take care of. That means I don't have time to think about the idea that a nine-hole course is easier to maintain than an 18-hole course.

"Our location is critical to the traffic flow on the course. We're about 10 minutes from downtown Boston; we're a municipal course; and we sell only nine-hole tickets. In addition, we have no tee times and play is on a first-come, first-served basis.

"So, we're busy. We do between 57 and 60,000 rounds a year. That's a lot of golf and a lot of traffic on the turf. This year the par-three course will run up about 25,000 rounds, maybe more, giving my crew and myself all the work anyone can handle.

"Incidentally, the crew consists of an electrician, mechanic, carpenter, and myself on the full time side. The season numbers vary after that but I do have three retirees who put in about 20 hours each a week. They're really a godsend for me. They're reliable, take pride in their work, and they take care of the equipment.

"From all those round numbers you can see that greens are a high priority area in the maintenance pecking order. Plenty of aerating and a couple of tines a year. Hey, we could be the busiest nine-hole course in New England. But it's my choice, to be here, and I wouldn't want it any other way.

**GERRY FINN**

# Changes planned for Stockbridge Turf Program

by Dr. Gail Schumann  
and Dr. Scott Ebdon, Co-Coordinators

Over the past year, the Stockbridge Turf Management Program faculty has worked with the UMass Turfgrass Program Advisory Board, additional professional turfgrass managers, and Stockbridge Director Nancy Garrabrants to revise and improve the curriculum. These changes, scheduled for September 1999, are designed to help better prepare students for professional challenges of modern turf management.

Making these changes posed a scheduling challenge. We reluctantly decided to shorten the summer internship by about seven weeks, enabling us to have four full semesters in the classroom. Note that the internship is still at least 15 weeks long, and provides tremendous opportunities for "on-the-job" training. The decision to modify the internship was not made lightly and followed input from many sources.

We recognize times have changed, and the summer internship is no longer the only "on-the-job" training students have before obtaining positions of authority. As recently as 10 years ago, some graduates started as superintendents of nine-hole courses or as top assistants at upper echelon courses. Today, most students who remain in golf start as second (or occasionally first) assistants and receive invaluable additional training from their employer. So we believe the advantages of additional classroom work outweighs experience gained in the first few weeks of a summer placement program. We also recognize that the value of a placement experience depends on the dedication of the "mentor". We count on all of you to help us find excellent placement opportunities for first year students so they can continue to benefit from that training.

We plan to review/modify the program, and we welcome comments and suggestions.

## Summary of Turf Program Changes:

### Course Changes:

**English 120** - Students will now take a full semester course rather than an 8-week course.

**Turf Insects (ENT 107)** - Students will now take this course right after the introductory insect course (ENT 104) and before (instead of after) internships.

**Plant Pathology** - Students will now have two exposures to plant diseases. Before they go on internship, Dr. Schumann will introduce them to the

basic concepts and prepare them for observations during their internship in the new course MICBIO 103. When they return in the fall, they will have MICBIO 105, the Turf Disease Lab.

**Advanced Turf Management (PLSOIL 340)** - Will now be co-taught by Dr. Ebdon and Dr. Torello.

**Turf Calculations (PLSOIL 190S)** - Dr. Ebdon has created this new 2-credit course to strengthen student preparation for calculations necessary in turf management.

**Pesticide License Preparation (ENT 182)** - This course has been moved from the first semester to the final semester, so students will have the academic preparation needed for the course.

**Special Topics - Turf Diseases (Elective) - MICBIO 497X** - This course stresses oral communication skills for discussing disease problems with customers and greens committees.

## GCSANE News

# Remember when?: GCSANE's past

*Remember when?* looks at significant individuals and events of GCSANE's past.

### 25 years ago

Guy Tedesco always could live with birdies but living with the birds? That's something else. The genial director of golf at the Country Club of New Seabury had been wrestling with a problem for many months, that of coping with seagulls. Seems the seagulls of New Seabury were untidy birds, using asphalt cart paths to knock the hard stuff off of captured shellfish, then swooping down and picking up the meat. The shells? They were left for Guy to deal with.

Several well-intended solutions failed to materialize until two guests from that seafaring state of Vermont came to the rescue. They suggested that Guy have pictures of seagulls painted on the cart paths, the idea being that the shellfish-carrying gull would look down at the path, see another gull waiting to steal his meat. Therefore, he would look for another spot to crack open his catch.

And it worked. The problem was gone. "Every time I tell this story, people think I'm pulling their legs," Tedesco said. "They can't believe two Vermonters could come up with an idea to fool a seagull. You just never know."

### 15 years ago

One of the giants of the golf course superintendents' world is coming to New

### Additional Changes:

**Balanced Credit Load** - Students will have a more balanced course load throughout the program.

**Internship** - The internship has been shortened to accommodate the academic additions. Students will be available for work at the end of spring classes, about mid-May. We have improved assignment and reporting policies used in the Internship program.

**Professionalism** - A series of lectures on professionalism by turf industry representatives is planned as part of a last semester course.

**Academic Standards** - The following courses will require a grade of "C" or better for graduation or to use the course as a prerequisite: PLSOIL 230 - Turf Management, PLSOIL 275 - Turf Physiology and Ecology, PLSOIL 340 - Advanced Turf Management, PLSOIL 190S - Turf Calculations, MICBIO 105 - Turf Disease Lab, and ENT 107 - Turf Insects

England with the announcement that Sherwood Moore has accepted that position at the new Captain's Course in Brewster.

"Funny thing," Moore quipped about the move from his most recent base, Winged Foot. "My wife and I were talking about the possibility of winding up at Cape Cod for our retirement years. Then, all of a sudden, along comes the opportunity to locate there while I'm still on the job. It's just great."

Moore, 68, will arrive at the Captain's Course in the middle of construction, but only after assuring Winged Foot he would stay around to supervise the preparation of the course for the 1984 U.S. Open.

"This will be different for me," Moore commented on the fact that the Captain's is a municipal layout with a minimum of scrutiny from golfers. "The other day one of the locker room boys at Winged Foot said I missed a real gathering. He told me that 200 superintendents were there, disguised as members. Now, that's one thing I won't miss. You know, you can only listen to one boss at a time."

### 5 years ago

Superintendent-Green Chairman tourney results from the Belmont C.C.: 1st gross - Jim Diorio & John Hayes, Purpodock. 1st net - Bob DiRico & Bob Howard, Brae Burn. 2nd net - Mike Iacono & Jim Herscot, Pine Brook. Closest to pin on #3 - Steve Carr; #12 - Lynn Fay.

GERRY FINN

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## Turf Science

# Gray Leaf Spot: Coming to a course near you?

By Dennis Watkins

Lords Valley Country Club, Hawley, Pa.

Virtually nobody had heard of it five years ago. It got some attention in 1995 in the Mid-Atlantic area when perennial ryegrass started "going south" in a hurry, with some superintendents losing their jobs in its wake. But 1998 was the year *Pyricularia grisea* - gray leaf spot (GLS) to some, "Blast" to others - made superintendents across much of the US stand up and salute. All indications are that GLS is here to stay, and its geography is spreading.

The American Phytopathological Society (APS) held a Gray Leaf Spot symposium

March 12 in Annapolis, Md., a particularly appropriate location since one of the first diagnoses of gray leaf spot on perennial ryegrass fairways occurred just up the road at Chartwell Golf & Country Club in Severna Park, Md. back in 1985. The symposium brought together university specialists actively studying the disease with golf course superintendents and other turf practitioners, and was an excellent overview of the current knowledge base about GLS, with most of the research having been done in the past two years (by popular demand). Six USGA Green Section regional agronomists were on hand, an indication of the severity of the

GLS problem. We will attempt to convey the "take-home messages" here.

### History

*Pyricularia grisea*, the causal agent of GLS, is a widely distributed fungus that is common on many grasses and weed

**"All indications are that Gray Leaf Spot is here to stay, and its geography is spreading."**

**Dennis Watkins  
Lords Valley C.C.  
Hawley, Pa.**

## GCSAA News

# Environmental Steward Award announces call for entries

The 2000 Environmental Steward Award Call for Entries is announced by Novartis Turf & Ornamental Products; Rain Bird; Textron Turf Care and Specialty Products with Cushman, Jacobsen, Ransomes and Ryan brands; and Pursell Technologies, Inc., in partnership with the Golf Course Superintendents Association of America.

The Environmental Steward Awards recognize the accomplishments of golf course superintendents around the world who demonstrate a commitment to environmental stewardship efforts on the golf course. Applicants are evaluated for overall course management in technology use, resource conservation, water quality management, integrated pest management, wildlife/habitat management, and education/outreach. Three national winners (one public, one private, and one resort course facility), up to three winners from each of GCSAA's 100 chapters, and a number of merit winners will be selected.

Applications for the 2000 awards are available through the GCSAA service center (800/472-7878) and from each participating sponsor. The application also is available on the GCSAA web site ([www.gcsaa.org](http://www.gcsaa.org)) and may be printed out or completed and submitted electronically. Entries are due to GCSAA by October 1, 1999.

Applicants from the United States must be members in good standing of GCSAA.

International applicants should be members of similar local organizations. To allow more honorees to enter the winner's circle, previous national winners of the awards are not eligible to apply for the 2000 awards unless they have moved to a different facility.

Winners will be announced in November and recognized during GCSAA's International Golf Course Conference and Show, February 14-20, 2000, in New Orleans. Rain Bird will honor the top national and international award recipients with a trip for them and their families to attend the 111th New Year's Day Rose Parade and related activities in Pasadena, Calif.

Novartis Turf & Ornamental Products; Rain Bird; Textron Turf Care & Specialty Products with Cushman, Jacobsen, Ransomes and Ryan brands; and Pursell Technologies, Inc. will contribute to The GCSAA Foundation in the names of all national and chapter winners. In addition, all four sponsoring companies each will donate \$5,000 to The GCSAA Foundation. Since 1993, sponsors of the awards have contributed more than \$125,000 to The GCSAA Foundation, and more than 200 superintendents have been recognized with awards.

species. It also causes Rice Blast, the number one disease of rice world-wide. Among the grasses, it was identified on St. Augustine Grass in Florida in 1957, and then on annual and perennial ryegrass fairways in Mississippi and Louisiana in 1972. As mentioned above, it was then observed in Maryland in 1985, and again in two locations in Pennsylvania in 1992.

GLS didn't garner much attention until 1995, when an outbreak of epidemic proportions occurred on perennial ryegrass swards in Maryland, Kentucky, Virginia, Delaware, Pennsylvania, New Jersey, and as far north as Staten Island, N.Y. Entire fairways and rough areas were lost within 48-72 hours. Many superintendents were taken by surprise, having neither seen nor heard of GLS before.

It is important to note that summer 1995 was the hottest and driest of the century in those areas, and followed a winter of devastating crown hydration damage to perennial ryegrass from sustained ice coverage (so there were high populations of relatively young ryegrass plants).

The scorching summer of 1995 was followed by one of the wettest and coolest summers on record in 1996. Some turf damage from GLS was evident that year, although limited mostly to chlorosis rather than the complete devastation seen the earlier year.

*continued on page 6*

## Gray Leaf Spot, Part I

continued from page 5

The scorching 1995 summer was followed by one of the wettest and coolest summers on record in 1996. Some turf damage from GLS was evident that year, although limited mostly to chlorosis rather than the complete devastation seen the earlier year.

The summer of 1998 was another hot and dry banner year for GLS, with damage reported in 20 states, as far north as Rhode Island and Iowa, and west to Kansas, Nebraska, and Oklahoma. It appeared that extreme, prolonged heat and drought coupled with extended periods of leaf wetness were again the major predisposing factors to GLS.

### Symptoms

Gray Leaf Spot usually first appears in "heat sink" areas of the golf course, e.g. compacted areas of rough or south-west-facing slopes. Nearby shaded areas may not be affected (even giving the impression of a "spray line" between the two areas).

### Symptoms of GLS include:

- Small oval "water-soaked" lesions (gray, some with a yellow halo) on the leaf margins, with tip dieback.
- Small reddish-brown to tan spots on the leaf blades.
- The youngest leaves often have a twisted, "fish-hook" appearance.
- Leaves may have a fuzzy appearance in the morning, but there is usually no readily visible mycelium.
- Small (2-3") patches of "droughty", chlorotic turf appear, which can enlarge to 1'-2' diameter patches within 72 hours. Any bentgrass or *Poa annua* in the turf will not be affected. Non-wilting *Poa annua* in a stand of "wilting" perennial ryegrass is a good indicator. This early "wilting" stage is usually short-lived.
- The droughty or wilted turf will not respond to syringing or irrigation.
- The patches of blighted turf quickly coalesce into large non-uniform areas, which then usually collapse completely.
- Symptoms typically start in the rough and then move into the lower-cut collars or fairway turf.

Compounding identification challenges of GLS is the similarity of many of the early symptoms to those of *Pythium* blight and/or *Rhizoctonia* brown patch.

*Pyricularia grisea* can produce huge numbers of conidiophores on both upper and lower leaf surfaces, virtually overnight. The conidia can then be spread by foot traffic, maintenance equipment, golf carts, wind currents, surface drainage patterns, or water splash. These conidia are then free to germinate as long as there is free moisture present on the leaf surface. Leaf wetness for duration's of 10 hours or more seems to favor disease development.

The pathogen generally enters the plant through recently mowed leaf tips, although it may also be able to enter at the base of the plant (resulting in the youngest leaf exhibiting the fishhook symptoms). Turf in severely affected areas may be lost within 3-7 days of initial symptom expression.

In most areas GLS manifests itself as early as late July or early August, other times not appearing until later. It can persist well through the first frost. As the pathogen is a "vicious" damping-off agent,

continued on page 8

## DIVOT DRIFT...announcements...educational seminars...job opportunities ...tournament results...and miscellaneous items of interest to the membership.

### INFORMATION

**Our condolences** are extended to Karl Heintzelmann and family on the recent passing of Karl's father.

**Please be aware that two meeting dates have changed.** The meeting at Marshfield C.C. will now be held on July 12, and the meeting at White Cliffs will be held on October 7.

**P.I.E. Supply**, headquartered in Milford, Conn., has been named the Legacy by Hunter golf irrigation equipment distributor for New England. Legacy by Hunter is the golf course irrigation division of Hunter Industries. P.I.E. will handle the sales and service of Legacy by Hunter irrigation systems throughout Connecticut, Massachusetts, New Hampshire, New York, Rhode Island, Vermont, and southern Maine. P.I.E. has branches in East Hartford and Milford, Conn. Hunter Industries recently acquired the Legacy product line from Buckner, Inc. of Fresno, Calif. Hunter had supplied Buckner with the Legacy G60, G70, and G90 golf rotors since 1995. With the new acquisition, Hunter now also manufactures and markets the Genesis Central Satellite and Viking Decoder Control Systems. "The purchase of the Legacy Golf line is an important step in Hunter's long-term strategy to become a major supplier of golf course irrigation equipment worldwide," reported CEO Richard Hunter. Hunter Industries is among the

world's leading irrigation equipment manufacturers and offers a complete line of rotors, spray heads, valves, and controllers for turf and landscape. The company is based in San Marcos, Calif., with a second manufacturing facility in Cary, N.C.

### POSITION OPENINGS

**Superintendent.** The Miacomet G.C. is a 9-hole daily fee course located on Nantucket Island. The course is a regulation par-37 seaside links style course with 300 members. A new Legacy-Genesis irrigation system was completed in May. Head superintendent experience is preferable, or three years of experience as an assistant superintendent. Individual must have a Mass. Pesticide applicator's license. Individual must have a working knowledge of budgeting and fiscal responsibility; must be able to oversee, train, and direct a staff; and formulate a long-range plan. Yearly salary also includes health and dental insurance, paid vacations, and travel expenses. The club pays all association membership dues and license fees. Send resume to: James LeBlanc, PGA, General Manager, Miacomet Golf Club, Inc., P.O. Box 2479, Nantucket, MA 02584; phone calls accepted (508) 325-0333.

**Assistant Superintendent.** The Fresh Pond G.C. is seeking an individual with a two-year degree in turf management and/or arboriculture; two years of experience in golf course management; a Mass. pesticide applicator's license; and driver's license.

Individual will be responsible for chemical and fertilizer application; computer record-keeping on Windows 95; irrigation system repair; equipment repair; IPM scouting and reporting; staff training and supervision; and Audubon certification. Salary includes two week vacation, one week compensation time, paid holidays and sick time, contribution toward health insurance, national and local association dues, and paid local conferences. Send resume to: DHSP, 51 Inman St., Cambridge, MA 02139, Attention Pat Johnson, Asst. Supt.

### TOURNAMENT RESULTS

**Scholarship & Benevolence Tournament  
May 17, 1999  
Wachusett C.C., West Boylston, Mass.**

1st Gross: Jack Hassett, Bob Hassett (69)\*  
2nd Gross: Mike Cummings, Mark Prendergast (69)

1st Net: Kevin "The Wizard of" Osgood, Greg Day (57)  
2nd Net: Pat "I Play Golf" Daly, Tom Larson (59)  
3rd Net: Dave Laffey, Bill Thompson (62)\*  
4th Net: Scott Hurt, Mike Ahearn (62)

Closest to the Pin #4: John Nadeau - 56"  
Closest to the Pin #18: Mike Keane - 13"  
(They both made great 3's)

\* indicates match of cards

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## Gray Leaf Spot, Part I

*continued from page 6*

fungicidal protection of over-seeded turf is critical for successful re-establishment.

### Genetic characteristics and concerns

*Pyricularia grisea* infects over 50 hosts within the grasses, including tall fescues as well as the ryegrasses and St. Augustine Grass. Dr. Mark Farman of the University of Kentucky is doing extensive research with DNA fingerprinting of GLS isolates to determine genetic variability, as the first step toward breeding durable resistance to GLS in ryegrasses and tall fescues.

Farman has found that GLS isolates from different grasses all look different, so they appear to be specific to certain hosts. As such, isolates infecting perennial ryegrass are probably not from rice or weed hosts.

However, Farman found isolates from tall fescue to be highly virile on perennial ryegrass, so it looks like there may be cross-infectivity between perennial ryegrass and tall fescue (closely related taxonomically).

According to Farman, most GLS isolates appear to be reproducing asexually rather than by sexual genetic recombination, which makes it easier to develop controls without worrying about continually facing new strains arising from genetic recombination. Because of the narrow range of identified GLS isolates, it is reasonable to conclude that GLS is a relatively "young" disease.

Although strains of GLS are genetically similar, DNA fingerprint groups may be geographically dispersed. There may be different isolates of GLS on the same golf course, or one isolate may be found across several states.

Research by Pure Seed Testing in North Carolina found a wide range of susceptibility to GLS within tall fescue varieties (from Coronado and Coyote being very resistant to Kentucky 31 being extremely susceptible), although GLS has not been seen on tall fescue north of North Carolina.

Tall fescues as a rule are much more tolerant of GLS than perennial ryegrasses, though there is a wide range of susceptibility

among ryegrasses when under light to moderate disease pressure. There is no high degree of resistance to GLS among ryegrasses when under severe disease pressure.

Complete resistance has yet to be identified in any cultivar of perennial ryegrass or tall fescue. Breeders are looking at potential hybridization of tall fescue and perennial ryegrass as a source of resistance to GLS. There is currently one annual ryegrass-x-tall fescue hybrid that displays complete resistance, but it would have to be further bred for turf-type characteristics.

According to Dr. Bruce Clarke, breeders at Rutgers are looking for GLS-resistant germplasm from outside the U.S. A GLS-resistant gene has been identified in rice, so they will look at ways to introduce it into perennial ryegrass cultivars.

It appears plant breeders must go back to the drawing board to "reinvent" turf-type grasses from GLS-resistant parent grasses, which unfortunately takes time and won't be a viable solution in the near future.

**See Part II in the July Newsletter.**

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