

Golf Turf Snow Molds

*Dr. Ward C. Stienstra
Extension Plant Pathologist
University of Minnesota
St. Paul, Minnesota*

Snow mold trials over the last twenty-four years in Minnesota have shown several interesting trends. First one cannot predict the level of damage from snow mold in the fall when the application must be made. The damage can occur either in the fall/early winter or more often in the spring period. Sometimes one can determine that about half of the damage was done early in the season and the remaining damage was done as the snow melted at the end of the season. Open, cold, dry falls usually have little early season damage; and in these years,

*Fungicide programs
of the past with
products like
mercury, chloroneb
and PCNB have
given season-long
control well into
the spring.*

the superintendent may be tempted to reduce the application rate of winter products, expecting less snow mold. A dry, frozen, usually well-hardened turf does not suffer much snow mold damage in the fall, but spring disease can still result in serious turf loss. If the winter delivers less snow and it melts quickly in the spring, one can nearly escape snow mold damage; but no long-term weather predictions have been able to describe this condition in the fall when the decision to treat must be made.

Even in those years when one makes predictions in December knowing what the weather has been like for the

(continued on page 22)

CANNON TURF SUPPLY, INC.

5104 Thatcher Rd.
Downers Grove, IL 60515

**Where Success Is Based on a
Commitment to People . . .**

STOCKING A COMPLETE LINE OF PESTICIDES, FERTILIZERS,
GRASS SEED AND ACCESSORIES FOR THE TURF PROFESSIONAL

Quality Products for the Turfgrass Professional
TOLL FREE 800-457-7322

(630) 852-3200
Fax (630) 852-3230

Golf Turf Snow Molds

(continued from page 16)

first portion of the disease season, you are not able to predict with any confidence what the disease damage will be. I know because I have tried to project disease damage levels and mostly have failed. The best one can do is to consider the long-term disease levels recorded/experienced at a location and plan for the same.

Snow mold treatment is a preventative program in Minnesota, and seldom in the past have spring applications produced positive results. Fungicide programs of the past with products like mercury, chloroneb and PCNB have given season-long control well into the spring. Additional applications after the snow melted were not needed as the persistence of

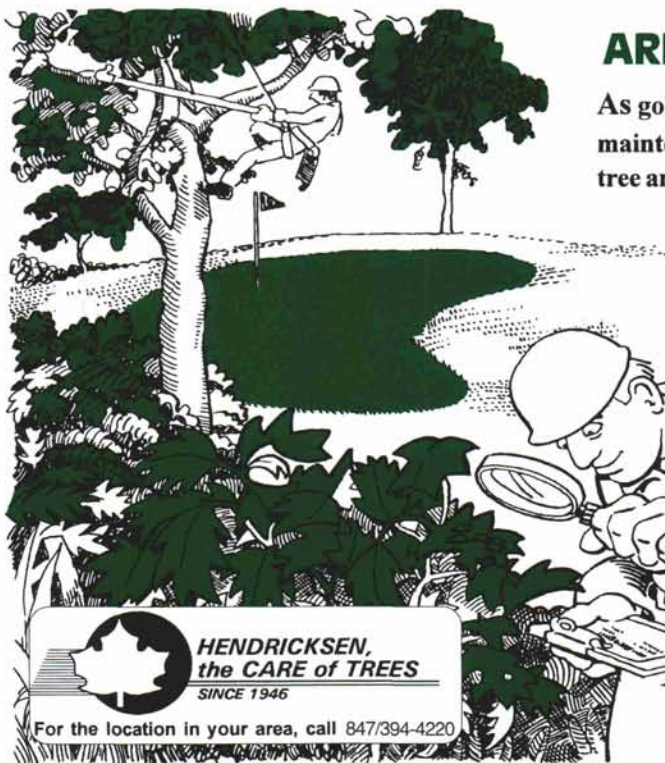
these products was good, and most often the conditions for extended cold/wet periods were limited. Spring developed rapidly, and turf seldom was exposed to cycles of repeated freezing/thawing. Some would say we had no spring and moved quickly from winter into summer. Most golf turf managers had very little spring leaf spot problem either.

The second trend is the development of spring/winter disease problems associated with the reduction in mercury use. Two factors are possible explanations: less persistent products have been applied, or the spring season is developing differently. One cannot clearly separate these factors. As the rates of mercury and PCNB products have been either reduced or eliminated, so also our spring season has

become longer with more periods of wet and cold temperatures. I believe the environment in central Minnesota has clearly become more favorable for spring/winter disease development; and even if the old product lines and rates were used, we would have more reports of spring/winter disease. Therefore, an early season application of products for management of Pink Patch (Pink Snow Mold) has become necessary. Good results are reported with DMI products.

The third trend is a much wider distribution of *Typhula ishikariensis*. The fungus most commonly reported in the past was *T. incarnats*, and I believe it was easier to control than this species. Fungicide control of snow molds in the '95/'96 test plot at Duluth,

(continued on page 28)



ARE YOUR TREES UP TO PAR?

As golf course professionals, you understand turf maintenance.... As Certified Arborists, we understand tree and shrub maintenance.

Let's combine our talents to provide the best possible recreational experience for your clients.

- Seasonal plant inspections for insects and diseases
- Spot pruning for sight lines
- Brush disposal, chipper rental
- Diseased tree diagnosis, sanitation pruning & removal
- 24-hour emergency response, weekend service

HENDRICKSEN,
the CARE of TREES
SINCE 1946

For the location in your area, call 847/394-4220

the Bull Sheet

(continued from page 20)

Brian Comiskey at Pinecrest G.C. has been busy adding and rebuilding 13 bunkers around the course.

George Ott at Hillcrest G.C. is rebuilding their par 3, 17th hole. That means building a new tee, realigning the fairway, and enlarging the pond by 20 percent by cutting into the right side of the present green and extending the green to the left to compensate for the pond enlargement. All new bunkers will be added. Plus George will be relandscaping the clubhouse area and parking lot.

Ernest Corsi at Royal Fox G.C. is looking for an assistant and a mechanic. Please send resumes to: Ernest C. Corsi, Royal Fox G.C., 4405 Royal & Ancient Drive, St. Charles, IL 60174. Phone 630-584-4000.

Congratulations to Melora and Tony Kalina, proud parents of Andrew Olson Kalina. Andrew was born August 9, weighed 8 lbs. 3.5 oz., and was 20.5 in. long. Tony reports everyone is doing great.

Over the Labor Day weekend, John Meyer happened to be at the Naperville Jaycees "Last Fling" and ran into Dan Anderson (Fox Valley C.C.). Dan and a couple of his friends for the past four years have been cooking ribs at this event. It turned out that Dan and his friends won First Place in the event. John states that the ribs were delicious; the meat fell off the bones. Although Dan won't revel the exact "secret recipe," he did mention it changes a little bit every time they cook. John is wondering if it changes due to the variety or quantity of beer used or consumed!



Who is our executive secretary? Well members, here is a face to put with the name. Please meet George Minnis (on the left) and our own standup comic, Vice President Ed Braunsky.

SLATE OF CANDIDATES

NOVEMBER 1996

For President
Ed Braunsky

For Vice-president
Kevin Czerkies

For Secretary/Treasurer
Robert Maibusch

For Director
(3 for 2 year term,
1 for 1 year term)

Don Ferreri
Brian Bossert
Greg Thalman
Nick Hongisto
Fred Behnke

Golf Turf Snow Molds

(continued from page 22)

Minnesota, show that a three-way mix of Chipco 26019F at 4 fl. oz. with Pennstar at 4 oz. and Daconil 2787F at 8 fl.oz. resulted in 1.5 percent disease while the check plots averaged 87 percent disease.

This treatment and other products were applied October 26 with a delivery system providing two gallons of water at 35 psi per 1,000 sq.ft. April 23, the first evaluation period was due to a very late snow melt off; therefore, no spring disease problems were seen. The last several years, evaluations dates were late March, which did allow for disease development in the spring period.

The last trend I'm concerned about is the low water volume application of fungicide products. In past years, I applied products in four or five gallons of water per 1,000 sq.ft. This may have been excessive, but it did cover up several application errors. For winter disease control, I believe one gallon per 1,000 sq.ft. is not adequate. At two gallons per 1,000 sq.ft., coverage and penetration are better. Fungicide dose is determined by the amount of product that is taken up by the plant at the initial wetting. When one uses higher pressure to cover the area with less water volume, the droplet size is reduced and canopy penetration is also reduced. High pressure and high travel speeds increase the opportunity for drift. Product not at the site of action is product wasted. If your spray system produces a mist of materials that tend to float, I believe it is set up wrong. ■