

T. K. Danneberger

"Green is Beautiful"

Ontario Golf Superintendents Association

54 HERNSHAW CRESCENT — ETOBICOKE, ONTARIO M9C 3M4 — TELEPHONE 622-9929



Christmas Dance "1980"

LOCATION:

LAMBTON GOLF & COUNTRY CLUB

HOST: PAUL & HELEN WHITE

DATE:

SAT., NOV. 15th, 1980

COCKTAILS:

6:30 P.M.

DINNER:

7:30 P.M.

BAND AND PRIZES

COST:

\$30.00 PER COUPLE

BOARD OF DIRECTORS - 1980

PRESIDENT.....	PAUL WHITE - Lambton
VICE-PRESIDENT.....	KEN NELSON - Sunningdale
SECRETARY	DOUG HOSKINS - Summit
TREASURER.....	JOHN SMITH - Wyldewood
PAST PRESIDENT	STU MILLS - Hamilton
DIRECTORS	DAN ARDLEY - Dalewood
	BOB BREWSTER - Weston
	AL DRAPER - Greenhills
	SHORTY JENKINS - Bay of Quinte
	BLAKE McMASTER - Brampton
	DAVID MOOTE - Scarborough
	RUSTY WARKMAN - Oshawa

MEETINGS 1980

Date	Course	Host
Saturday, November 15	Christmas Party, Lambton Golf & Country Club	Paul White
Tuesday, December 2	Aurora Highlands - Annual Meeting	
Tuesday, January 6	Symposium, University of Guelph	

Executive Sweet

Out on the fringe of the 7th hole,
Stands a singularly strange device,
Prompted no doubt by an architect
With carefully thought-out advice.

Referred to by some as a 'salon pour femmes,'
By others a less flattering role.
It looks quite a bit like a sentry box
With a seat that has only one hole.

One enters this thing through a wooden door
Then is faced by a foot-high step,
Another one looms at the very same height,
To add zest and elan plus some pep.

When madam is seated on this ominous perch
With her head barely scraping the ceiling,
She finds that the door just cannot be closed
And this leads to an un-private feeling.

There surely must be for a gal in distress
A much more congenial spot
Where she can sit and meditate
On what she has thus far shot.

EDITOR:

BOB BREWSTER
Weston Golf & Country Club
50 St. Phillips Road
Weston, Ontario M9P 2N6
Phone (416) 241-5551

CO-EDITOR:

BLAKE McMASTER
Brampton Golf & Country Club
P.O. Box 38
Brampton, Ontario L6V 2K7
Phone (416) 459-5050

WINTER DISEASES OF TURFGRASSES

By: Dr. J. Drew Smith
Research Scientist, Agriculture Canada.
From G.C.S.A. Conference 1974

The non-specific terms "winter injury" and "winter kill" are often used to describe any type of damage which may occur to plants during late fall, winter and early spring, particularly in regions with long, cold and/or snowy winters — like Canada, except for coastal regions. In the case of turfgrasses, Beard remarked that it is better to specify the cause(s) of the damage than to use a rather vague term such as "winter kill" since control is dependent on knowing as precisely as possible the cause(s) of the injury. While it is convenient to categorize winter damage to turfgrasses under such separate headings as direct low temperature injury, low temperature dehydration and low temperature fungal pathogens, injury often results from the interaction of these factors. It is probable that fungi, and bacteria are involved in most winter diseases either initiating damage or rotting away tissues already weakened or killed by physical processes such as freezing and desiccation. Some of the fungi involved in winter diseases are capable of invading the tissues of healthy living plants, e.g. *Fusarium nivale* (Fr.) Ces. and *Sclerotinia borealis* Bub. and Vleug., but some are, as the name implies, snow moulds, i.e. either saprophytes or weak parasites. These fungi have the advantage that, while the metabolic processes of the grasses have been greatly slowed by winter temperatures, they can still go on growing — they are psychrophilic, which literally means "cold loving". However, it is better to think of most of them as being "cold tolerant". The main purpose of this paper is to examine some of the winter disease problems caused by fungal pathogens. Their identity, distribution and disease control will be reviewed.

The winter diseases

The salient characteristics of some of the winter diseases of turfgrasses are given in Table 1.

Table 1. Some characteristics of winter diseases of turfgrasses

Common name	Pathogen	Distribution (tentative)	Predisposing causes	Fungicides
Fusarium patch or Pink snow mould	<i>Fusarium nivale</i> (Fr.) Ces.	Cold continental to cool temperate oceanic climates.	Unbalanced or excessive nitrogen. Alkaline turf surface. High turf surface moisture. Cool humid weather or snow cover. Susceptible <i>Poa annua</i> or <i>Agrostis</i> spp.	Mercury chlorides, P.M.A., benomyl, thiophanate, thiophanate methyl, P.C.N.B., dichlorophene, chloroneb.
LTB (non-sclerotial) SLTB (sclerotial) snow moulds	Unidentified low temperature basidiomycetes	Sask., Alta., and B.C. (LTB + SLTB) Man. and Alaska (LTB). Lower snowfall regions	Susceptible cultivars in most turfgrass species. Heavy to light snow cover. SW slopes (SLTB). Forced fall growth.	Mercury chlorides, P.C.N.B., chloroneb. Other materials erratic, require further testing.
Typhula snow mould	<i>Typhula incarnata</i> Lasch ex Fries. <i>T. ishikariensis</i> Imai. and <i>T. spp.</i>	<i>T. incarnata</i> in eastern and western Canada, not Sask. or Alta. <i>T. ishikariensis</i> northwestern Canada. <i>T. sp.</i> Western Canada.	Forced fall growth. Deep snow falling on unfrozen ground. Susceptible cultivars of most turfgrasses.	Mercurials generally, cadmium and chloroneb (<i>T. incarnata</i>). Mercury chlorides P.C.N.B., chloroneb (<i>Typhula</i> spp. and complexes)
Sclerotinia snow mould	<i>Sclerotinia borealis</i> Bub. & Vleug.	Sask. Alta and B.C.	Deep snow cover as under drifts. Susceptible cultivars in <i>Agrostis</i> , <i>Poa</i> , <i>Festuca</i> .	P.C.N.B., chloroneb, benomyl, P.M.A.

Winter Diseases of Turfgrasses (cont'd)

It appears from published papers that more work on the taxonomy, distribution and control of turf diseases has been done in western than in eastern Canada and wider range of snow mould pathogens reported from the west may simply be related to this. However, accurate diagnosis of the cause provides the only sound basis for control studies. Recognition of the causes of winter turf diseases is complicated by the occurrence of disease complexes of more than one snow mould.

FUSARIUM PATCH DISEASE or **PINK SNOW MOULD** caused by *Fusarium nivale* (Fr.) Ces. is widely distributed on amenity turf of all types from extreme continental to warm temperate climates, and may develop under snow covers or where snow never falls. The pink colour which may develop on dead leaves in spring is due to pigment produced by the fungus. While known to be common on grasses in eastern and extreme western Canada, it has recently been noted as a major fall disease of golf greens composed of bent (*Agrostis* spp.) or annual bluegrass (*Poa annua*) in western and west-central regions. There it may appear in cool humid weather in fall, often being noticed after the melting of an early autumn snowfall. If left uncontrolled, the disease may progress under the snow cover and appear as large patches in spring. In Saskatchewan it is believed to be the primary cause of much winter death of *P. annua*, often the major component of older golf greens. Most turfgrass species are susceptible, particularly if unbalanced or excessive fertilizer is used in fall. Very little is known about resistant varieties of bents suitable for the more extreme continental climates although attempts are being made by several workers in western North America to develop resistant lines of turfgrass species. *Poa pratensis* varieties, while attacked, are rarely killed below crown level, hence they may rapidly regenerate.

Fungicidal control of Fusarium patch disease may be expected with systemic fungicides such as benomyl or thiophanate methyl, provided that repeated applications are made during fall, winter and spring. Conventional fungicides such as cadmium compounds, P.C.N.B., chloroneb, chlorothalonil and mercurials may be effective. Where only one fall application is possible, inorganic mercurials are still probably the most effective fungicides but phenyl mercuric acetate (P.M.A.), pentachloronitrobenzene (P.C.N.B. or quintozone) and chloroneb have given good control in some Saskatchewan tests (19). Effective control in snowy regions is probably dependent on fungicidal prevention of those attacks which develop before the permanent snow cover arrives. In fall 1973 single applications of benomyl, P.C.N.B., thiophanate, dichlorophene and inorganic mercury were effective in preventing these in Saskatchewan. When disease had already developed on *P. annua* turf in fall 1972, single, late fall applications of P.M.A., P.C.N.B. and chloroneb were the most effective in preventing further development under a snow cover but neither chlorothalonil, thiobendazole, benomyl, chlorophenate methyl, BAS 3460F nor CA70205 gave significant control under these conditions

TYPHULA BLIGHT or **GRAY** or **SPECKLED SNOW MOULD** is characterized by the presence of sclerotia, or resting bodies of the fungus on and in plants which may give the turf of diseased patches a speckled appearance. There are apparently three *Typhula* spp. commonly associated with snow mould patches on turf in North America. *T. incarnata* Lasch ex Fries (= *T. itoana* Imai = *T. borealis* Ekstrand) occurs in heavy snowfall regions in the northern states of the U.S.A. and is probably the common species in adjacent provinces of eastern Canada although there do not seem to be any official records of this.



Paul Dermott and Jack Harris looking for the camera.



Kimmo explains to Dr. Switzer and group that Pepsi is the best.

ASSISTANT SUPERINTENDENT

REQUIRED FOR

GREENHILLS

A 27 HOLE GOLF and TENNIS COMPLEX

*Individual should have education in
Turf Management and a golf related
background, with a minimum of 2 years
ex perience.*

Please send resume and expected salary to:

*Mr. Al Draper
c/o Greenhills
R.R. # 3
LAMBETH, Ontario
NOL 1S0*

KEN WRIGHT & BEN KERN WIN 1980 PRO-SUPERINTENDENT

On September 16, the Pro-Superintendent was played at Lake St. George Golf Club in Orillia, Ontario. A cloudy and cool day greeted the players as the team from the National came through with a fine team gross score of 153.

Final Results: Team Gross:

National – Ben Kern, Ken Wright	153
Richmond Hill – Ken Venning, Peter Barnett	155
Oakville – Dave Clayton, George Garner	156

Team Net:

Markland Wood – Ken Duggan, Bob Heron	145
Glendale – Gary Maue, Peter Spencer	148
Bayview – Warren Crosbie, Jim Wyllie	149

Superintendents Gross:

Dan Ardley	78	Brent McCaffery	69
Hugh Kirkpatrick	80	Henry Geurtin	70
Bruce Vollett	82	Shorty Jenkins	70

Net:

Pro:	
Ben Kern	67
Ken Duggan	72
Bob Breen	72

ALEX McCLUMPHA TOURNAMENT

Held at Dalewood Golf Club, Port Hope, Sept. 29
Host: Superintendent Dan Ardley

The conditions, weather wise and playing, were excellent at the Dalewood Golf Club for the Annual McClumpha Fun Day with a field of ninety-four superintendents, assistants, and guests competing.

Many thanks to Dan Ardley, his staff, the staff at Dalewood and the McClumpha Committee for a very enjoyable day.

Our compliments to Dan on his golf course and in particular the greens, which to say the least were "extremely slick" and took their toll on our scores.

Superintendents:

1st gross – Ken Wright, National	74
2nd gross – Bill Bowen, Peterborough	78
3rd gross – Dan Ardley, Dalewood	78
1st net – Hugh Kirkpatrick, Westmount	70
2nd net – Bill Fach, Essex	71
3rd net – Steven Miller, Burlington	72
Bernie MacDonald	
5th net – Bob Heron, Markland	73

Assistant Superintendents:

1st gross – Tony Winter, Kleinburg	76
2nd gross – Randy Higgins	79
John Harris	79
1st net – Bruce Burger, Dalewood	71
2nd net – Len Coward, Bay of Quinte	73
3rd net – Rich Staughton, Bayview	74

Guests:

1st gross – Dave Keith, Turfcare	76
2nd gross – Al Assance	84
1st net – Bob Keyes	73
2nd net – Bruce Pridham	73
Bert Davies	73
Most Honest – Shelia Winsor, Brampton	146

SCRAMBLE GOLF AT BAYVIEW

On October 14, our final golf meeting was held at Bayview Golf Club. Paul White, President welcomed all participants and covered various meetings and events for the year. A discussion on chapterization of the G.C.S.A.A. was discussed and it was felt that a letter from the O.G.S.A. be sent. This letter was to state that the O.G.S.A. does not support their ideas. Jim Wyllie gave a short talk on the work that has been completed at Bayview in the last year. This included converting the irrigation system to automatic and erecting a new maintenance building. They also dug out and replaced all sand in the bunkers and will be planting 180 trees this winter. After Jim's talk the group broke for lunch and the golf committee organized a 3-man team scramble. Winners for the day were:

Bob Heron		Blake McMaster	
Shorty Jenkins	67	Thom Charters	68
Dave Dick		David Moote	
George Garner		Dave Keith	
Moe Endicott	68	Jim Wyllie	69
Don Bassett		Ron Wilczynski	

Special thanks to Jim Wyllie and Bayview Golf Club for a fine day. Also, thanks to Dan Ardley, Ted Ellis and Dave Moote for organizing the scramble. It was a "FUN DAY".



Dr. Switzer explaining that the University of Guelph has tradition, Dr. Tom Fisher agrees.



Paula Scenna explaining to O.G.A. President that he should get a raise in 1980.

FROM THE EDITOR

I have enjoyed being Editor for the past three years but it is now time to turn the job over to someone else for some new ideas. I would like to thank Ross Ditner Printing Limited and Jackie Dermott for all their help.

We were sorry to see the passing of Hugh Moulton of Windsor Park Golf Club. He was killed in a car accident in September.

The Annual Meeting is just around the corner. A vote will be taken to accept Assistants into the Association and a special report on proposals to re-structure our Association.

At this time American Airlines has the cheapest flight to Los Angeles for the G.C.S.A.A. Conference. There could be a seat sale offered in December so check with your travel agent.

YELLOW FAIRWAYS

By: Joseph M. Vargas

Many fairways in Michigan and surrounding states experienced yellow (chlorotic) turf on fairways and greens. The problem was observed on creeping bentgrass, annual bluegrass and Kentucky bluegrass. The problem was caused by the heavy rains and is commonly known as "wet wilt" which means the grass plant wilts even though (or because) the soil is saturated with water. Technically, when the soil becomes saturated with water, it removes the oxygen from the soil. Since water uptake is an active process, it requires oxygen and without it water cannot be taken up by the plant no matter how much is present. In addition, the root hairs which take up most of the water and nutrients die quickly in the absence of oxygen. This further complicates the problem because even after the soil dries and oxygen returns, there are no root hairs available to take up water and nutrients. It may be several days or even weeks depending on the environmental condition before new root hair are produced. In the meantime, the plant is incapable of taking up nutrients and water in quantities sufficient to maintain survival. Therefore, supplemental means of feeding the plant become necessary. Liquid nitrogen at 1/8 to 1/4 lbs/1000 sq. ft., in combination with iron sulfate helped the plants to survive until new root hairs were produced. Discontinuing the normal irrigation cycle and syringing during the warm part of the day, helped the turf survive until new roots were produced. In all instances, "wet wilt" was worse where normal irrigation cycles were continued. Each season a little more information becomes available on how to maintain turf during stress periods. Hopefully over a period of time we will be able to develop cultural programs to deal with all the various situations.

TURFGRASS RESEARCH PROGRESS IN ONTARIO

Now that contributions to the Ontario Turfgrass Research Foundation are tax deductible, we hope to increase our efforts to raise funds for turf research in Ontario. To this end the Board of Directors is most anxious for all members of the Foundation to put forward any suggestions they may have for fund raising. This includes all members of the Ontario Golf Superintendents Association as well as our commercial and academic members.

Our modest efforts so far this year, which of necessity were put into action on short notice, have been quite successful and clearly show that money is available for turfgrass research if we can make direct contact with those who will benefit most from better turf, maintenance, and generally better playing conditions.

The donations from the Ontario and the Western Golf Superintendents Associations so far this year got the foundation off to a good start. The opportunity to participate in the Duke Lawn Annual Auction of Used Equipment raised \$706.76 which was most welcome, and especially gratifying as we had so little time to publicize the plan. However, we have been offered the same opportunity for next year, and the Superintendents have had a chance to evaluate the idea which enables the clubs to dispose of surplus equipment, get their price by specifying a reserve bid, and at the same time, make a tax deductible donation to the Foundation.

Several members, particularly Dan Ardley and Gord Wittveen have had some experience with golf tournaments and field days used by several U.S. Associations to raise money for their research projects, and although there wasn't time to organize a tournament of the magnitude of the one the Michigan and Border Cities Association stage, we were offered, on very short notice, the use of the National Club. We were able to set up an invitational golf tournament followed by a social hour and steak Bar-B-Que. The latter was held at the Board of Trade Turf Centre. About 42 players teed off in the two hours allotted us. Included were representatives of the Superintendents Association, Golf Associations, Industry and several members of the academic field. Altogether \$2750.00 was raised for the research fund, and our thanks are extended to all who took part and all who helped with the day. Special thanks go to Gil Bleckman and Ken Wright of the National Club. Gord Wittveen and his staff at the Board of Trade, and to Duke Lawn Equipment for providing the prizes. Because of the short time we had to arrange the day, and only two hours of starting time, just a limited number of guests could be included. We hope that next year we can expand and accommodate everyone who wants to play. Certainly, everyone there this year has expressed a desire to be included in the future.

Our next objective will be to try to persuade each Ontario golfer to contribute towards turf research. To do so, we hope to persuade every Ontario Golf Club to budget a yearly contribution starting in 1981. We have set a target of \$1.00 per golfer per year. We realize this will take a lot of work, but if each superintendent will support this appeal at his club, we can eventually approach this objective. Always remember that every advance in turfgrass evaluation and maintenance can make our job easier, and playing conditions better for every golfer.

HOW DO WE APPLY OUR WATER AND WHY?

By: Bob Brewster

The Weston Golf and Country Club has had three irrigation systems installed in its history. The last system was installed in 1955 by Bill Powell at a cost of \$65,000. Both piping and the pumphouse are in good working order at the present time.

The main lines are 8" and 6" cast iron pipe, 4" to 3" black iron to 2" to 1 1/4" galvanized pipe. Buckner snap valves were installed requiring a double lug key. A valve was installed on each side of a green and a single row system was used at a spacing of 99 feet. The pumphouse was built along the Humber River which included an 800 gallon per minute centrifugal pump that fed the river water into a storage tank 10'x30'x30' deep. The water is then pumped to the course with 2 vertical trubines that pump 300 gallons per minute.

In the Fall of 1973, a manual pop-up irrigation system was installed from our present system. PVC pipe of 2 inches for greens and 1 1/4 inch for tees, along with gate valves to control flow. In some areas where the pressure had been low we went back in the fairways and picked up the larger size pipe to give us better water pressure.

In 1978 the present system was converted to a Toro normally open hydraulic system. The heads around the greens were changed to run in pairs and the fairway couplers were removed and replaced with a galvanized swing joint and rotary pop-up. There were 24 satellite stations required to cover the course along with the main control panel.

The advantages of the system greatly outweigh the disadvantages. When I first started at Weston we had two night watermen and the oldest fellow thought that the more water you could put on the better. They would take 8 hours to water greens and tees and 8 hours to water the fairways. During dry spells and windy weather several areas would start to burn out. They would then start watering through the day and due to our clay soil the golfers were playing through 18 holes of water.

When we changed to pop-ups on the greens and tees the coverage on and around the greens became far better. We cut our watering on greens and tees from 8 hours to 4 hours and we had also cut the watering of fairways down to 4 to 6 hours from the present 8 hours.

Last year was our first full season with the complete course automated. I started watering greens, tees, and fairways at 10 minute intervals and later reducing the times to seven minutes and then to five minutes. Depending on the weather I found I was watering greens and tees 10 to 15 minutes a night and fairways 15 to 20 minutes a night. We have now cut our watering down to 5 to 6 hours per night.

The weather factors and the amount of moisture in the soil determine for me the amount of water I will use each night. Every golf course is different and will require different amounts of water. Any system is only as good as the person who is operating it. All the changes we have made to our irrigation system at Weston has improved the condition of the golf course and given myself peace of mind.

EVALUATING YOUR OPERATION

With the passing of summer, golf course superintendents in many parts of the country have an opportunity to step back, take a deep breath and evaluate their operations. On many courses, heavy player traffic has slowed, seasonal employees have gone and budget time is approaching. It's time to take inventory.

Besides the problems of getting the course and equipment ready for winter and inventorying leftover supplies, it's also time to look back over the summer and take a mental inventory of your operation's strength and weaknesses.

For example, what went wrong during the season? Was your course damaged by disease or insects? If so, what can be done to prevent a recurrence? Now is the time to figure out what should be done and when.

Were your crew members aerifying the course on the day of a club tournament? The slow seasons are the time to work out lines of communication to prevent such misunderstandings from happening next year.

What can be done to improve the course? Take an objective look at your irrigation system, your equipment and the design and condition of your course. Maybe this is the time to plan improvements.

While you are evaluating your performance over the last season, don't overlook the things that went especially well, either. Did you pick up any additional responsibilities this year, responsibilities you might like to continue? Did you try a new scheduling program that was effective? How can it be changed to work any better?

Which of your employees really came through for you? Did an assistant take over some of your responsibilities and run with them? Which employees are willing to put out a little extra effort? Which ones seem to have good, new ideas? Did one of your seasonal employees prove to be especially hard-working and reliable? If so, you will want to make arrangements to have him back next year.

Now take a look at those projects that were put off all summer. Now is the time to dust them off and get to work on them.

Here is where a good filing system comes in handy. By taking clear notes on problems and opportunities as they occur, and by adding to those notes when you evaluate your operation at the end of the season, you can develop a handy reference tool for use in the future.

Whatever your evaluation of the summer proves, it's important to reap whatever benefits you can. If everything went relatively smoothly, it's just as vital to know why as it is to uncover the causes if there were problems. By building on the past year's achievements and avoiding it's mistakes, we can face anything the future has to offer.

—From Forefront.

POSITION AVAILABLE

Beachgrove Golf & Country Club requires an Assistant Superintendent.

Applicant should have the potential and desire to take an active role in the management of course maintenance and related projects and should also possess practical and technical abilities.

Please apply in writing, stating salary expected to:

MR. HENRY GEURTIN, Course Superintendent
14185 St. Gregory
St. Clair Beach, Ontario N8N 1K6

January 1981

				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20				

Mark Your Calendar Now!

GCSAA's 52nd International Turfgrass

Conference and Show

Anaheim, Calif. Jan. 25-30, 1981

			21	22	23	24
			Tournament practice rounds at Industry Hills GC, Anaheim Hills GC		GCSAA Golf Tournament	Seven GCSAA Seminars begin
25	26	27	28	29	30	31
Seven GCSAA Seminars continue	Conference Opening Session Get-Acquainted Party	Trade Show opens Education Sessions Continue	1981 Annual Meeting	USGA Green Section Turf Conference Trade Show Annual Banquet	Golf Course Tour – Industry Hills GC Disneyland Fun Day	Postconference Tour departs for Hawaii