## A SHORT WRAPUP OF THE 1989 GOLF SEASON

by James Latham, Director Great Lakes Region, USGA Green Section

Arecap of the 1989 golf turf season is difficult because it was so varied-from sheer disaster to disappointment to downright delightful, depending upon where you were at the time. It was a year of opportunity for many because of an apparent return to the usual Midwestern climactic patterns and for others because Mother Nature suddenly eradicated <a href="Poa Annua">Poa Annua</a> in places few superintendents would dare to try.

At some time during the winter, golf courses from Michigan to Montana experienced classic winterkill of Poa Annua and perennial ryegrass. This phenomenon can be expected locally in almost any year, but seldom has it been so extensive. The greater Chicago area, for example, missed the experience by less than 60 miles, but the six states to the north, east, and west were extensively blessed (?) with this cheap Poa Annua control process.

It seemed to work this way:

- The soil was frozen.
- There was a thaw and the meltwater was retained at the turf surface (even with sand greens) in depressions, on gentle slopes or even flat spots where Poa Annua dominated in the past.
- The temperature dropped suddenly to well below freezing.
- Ice formed in the saturated crown tissue of the bunch grasses and destroyed cell structure.

To make matters even worse for some superintendents, the thin green cover materials <u>did not</u> prevent damage. The only escapes in the epicenters of winterkill were greens (etc.) which retained snowcover or those with thick, excelsior mats.

Comments by superintendents who used covers:

- The thin covers may have aggravated the situation by broadening the day/night temperature spread.
- The thick covers probably kept the green surfaces from thawing.
- Medium thickness covers on top of a rather heavy, late topdressing apparently gave enough insulation to prevent surface thaw or refreezing.

This situation was compounded by very poor growing conditions in early spring which defied attempts to reseed. Even <u>Poa Annua</u> seed germination was minimal. The superintendents who persevered with multiple reseeding operations now have bentgrass in quantity where it has not been in a long time. By initiating maintenance operations which keep it competitive, they can use <u>Poa Annua</u> suppressants to their best advantage. Otherwise, the spring miseries will return to plague them again and again.

Substantial losses of perennial ryegrass occurred in South Dakota and Wisconsin underlining their unreliability as a primary golf turf species in this latitude. They apparently need backup by Kentucky bluegrass, fine fescues or some type of more winter hardy grass.

There are, of course, exceptions to these loss patterns, but they were rare at the courses visited during Turf Advisory Service tours this year. In some instances, I simply confirmed the superintendent's statements that it was impossible to predict the episode and that normal maintenance operations could not prevent this kind of winterkill. It became evident that agronomics must play a larger role in golf turf management so that bentgrass can become more competitive to help <a href="Poa Annua">Poa Annua</a> controls become more effective. Now that we have the means to suppress <a href="Poa Annua">Poa Annua</a> aggressiveness, it is possible to reestablish bentgrass and/or Kentucky bluegrass in key areas, but it is imperative that they compete or the cycle will begin again.

Some other strange events took place this season. The sudden appearance of mini-fairy rings on the greens at a couple of courses was one. At about the same time, similar rings elsewhere disappeared after a couple of years in residence. Why? How?

The black layer syndrome hasn't gone away either. The sporadic rainfall pattern had a great deal to do with this-probably. Soil oxygen is still the key to prevention and cure. Internal drainage and the elimination of spongy organic layers by aeration and topdressing are necessities. And remember that black layers aren't new. O. J. Noer commented on black odorous soil profiles in greens over 50 years ago. They were just harder to see at that time.

Supplying the anaerobic organisms with oxygen by applying potassium nitrate or similar materials will help to reduce immediate damage, but that is simply treating a contributing factor and not the cause. The cause of black layer in sand, clay, or stratified profiles is usually an excess of water.

The non-capillary (drainage) pores or air spaces are filled with water. Buried thatch becomes a saturated sponge. Layers of anything restrict the downward flow of water

which pulls air into the soil after it. And let's not forget that plant roots need oxygen, too.

It seems that more clubs are accepting their greens Stimpmeter readings of 8 to 9 feet. A high percentage of the membership are enjoying that speed. There is also the realization that juicing the surfaces up to 11 feet from 9 for a member-guest event destroys the home course advantage. In other words, maybe speed-need is the figment of the imagination of would-be Tour-sits and not the will of the bill-payers.

There are, of course, clubs in which the majority of the members want tournament class greens at all times and are willing to pay for them. That's fine with me as long as they realize that fast greens are, necessarily firm and that fast, firm, greens should be accompanied by fast, firm, fairways and the level of management they require. The bottom line is a golf course that equates 18 very large greens, mown at several heights of cut, but with the same general maintenance procedures throughout. That includes vertical mowing or brushing to minimize the tee toward green grain which comes from cart use on fair-This applies to both bentgrass and bluegrass. Banning golf carts from the fairways usually destroys the intermediate roughs, so unless these vehicles are limited to roadways, be prepared for higher maintenance costs or lower quality playing conditions. Golf cars are like taxes-we do not like them but we do like the revenues

they generate.

Speaking of golf car traffic, have you noticed the damage being done by the concentrated traffic of maintenance equipment? Some of the wear is in non-play areas, but certainly not all of it.

The traffic problem continues to mount on practice tees, where few golf operations have adequate space. Even fewer can do anything about it except recycle the available area they have. This brings ryegrass to the forefront even though it is no more than temporary turf that will be destroyed in a short time. The best results have been attained by "using up" strips of turf across the width of the tees before moving play to another strip. The damaged strip is then double aerated and the cores broken up, followed by heavy (15-20 lbs. per 1,000 sq. ft.) seeding and topdressing or just mixing the seed with the soil from the cores. Rolling and fertilizing finish the job. Fungicide treated seed minimize the danger of damping off until a systemic fungicide can be applied-at about the time of the first mowing.

If you want to turn green with envy, just see the creation at St. Andrews Golf Course in Chicago, under the care of John Lapp. Acres of bentgrass and ryegrass/bluegrass plus a 39-mat slab for night use. Real greens for targets and real sand in the bunkers. Or look at the Hinsdale Golf Club's bandbox practice area which provides such a



variety of shots you won't miss using a driver. Bob Maibusch is rightly proud of this unique installation. There are other fine practice ranges throughout the Great Lakes Region but these are tops on their size classes.

A closing thought: If we are to keep bureaucratic regulations off our back, we must make them unnecessary. The way to do this is to stay ahead of the game through safe storage and application of chemicals, employee training and protection and a close look at our own operation as if we were an inspector who had never seen the place before and had not issued enough citations recently.

## PREVIEW OF MGCSA TURF CONFERENCE

by Kerry Glader, Dan Hanson and Jim Nicol 1989 Conference & Education Committee

With the welcome frosts of October, our 1989 growing season will soon be coming to a halt. The 62nd MGCSA Annual Turf Conference and Business Meeting and Elections are little more that a month away.

The Conference Committee has put together a diverse agenda which we feel should be of interest to everyone.

As required by the Minnesota Department of Agriculture, the 1989 Pesticide Applicators' Training sessions will run all day on Wednesday, November 29. This will re-certify any currently licensed applicators who attend this session. Topics range from aquatic weeds and controls to "Employee Right to Know." Speakers at this session will include: Wayne Dally, Bill Smolley, Jim Cink, Ward Stienstra, Bob Mugaas, Don Henning and Steve Aunan of Fink Spray Systems.

The General Sessions on Thursday and Friday will provide a diverse list of topics which were derived by having polled our membership for suggestions. These suggestions provided us with speakers and topics which will be first time presentations to our Minnesota group.

All of this will take place on November 29 through December 1, 1989 at the Sheraton Northwest in Brooklyn Park, Minnesota. I know we will be welcomed warmly and that we will enjoy our return to the Sheraton. Enclosed you will find a hotel reservation postcard for your convenience. These reservations must be made directly with the Sheraton Northwest.

We will ask that you please use the advanced registration information that is also enclosed. Please get this in before the November 20, 1989 deadline and save yourself a lot of money, time and trouble when you arrive at the conference. MGCSA members will enjoy a \$20.00



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