

UNITED STATES GOLF ASSOCIATION GREEN SECTION EASTERN REGION

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SNOW MOLD AND WINTER INJURY

During the past few years snow mold and winter injury on greens have become more and more a problem in the northern states of this Eastern Region. Winter problems have been rather serious during the past three years. The need for coming out of the winter in good condition is of paramount importance because with the heavier use of the golf course in Spring... golfers flock to play just as soon as they are permitted on the course... Snow mold and/or winter injury could mar greens well into June... and now is the time to begin to work toward the prevention of winter problems.

There are several types of injury that winter can bring - -

- (1) Snow mold -- this is a disease... caused by cold weather fungi... when weather conditions are right, the fungus becomes active... the turf need not be covered with snow to become affected with snow mold disease. However, oft-times when conditions are right... and melting snow creates a layer of ice... with a vacuum between ice layer and turf... then the fungal activity is oft-times greatly accelerated.
- (2) Winter injury caused by desiccation... which is a drying out of the turf... usually due to strong drying winds... on days of low humidity... where the uptake of water is less than that which is used up by the plant in transpiration. Desiccation occurs most frequently on high areas on greens, slopes, mounds and/or terraces... when turf is not protected by snow cover.
- (3) Winter injury caused by water-logged soils... when excessively wet the turf is in greater danger of injury through smothering... through added disease incidence.

What can be done to help insure that injury will be kept to a minimum... here are a few things to remember.

- (1) Snow mold seems to affect greens cut high more so than closely cropped turf...it is important therefore to mow aprons and greens regularly until they stop growing...do not send them into the winter "needing a haircut".
- (2) Snow mold incidence is increased if turf is soft and succulent going into the winter...do not overfeed in the Fall...do not try to stimulate greens and aprons excessively in Fall...it is best to send turf into the winter "hardened-off".
- (3) Snow mold and winter injury increases if drainage is poor...if water collects on surface or in soils...drainage improvements should be made before going into the winter if possible.
- (4) Top dressing greens with top soil just prior to the winter season is often helpful in protecting greens against desiccation...1 1/2 to 2 cu. yds. per average green is the usual recommendation.
- (5) If grasses are deficient in potassium, they may be subject to greater injury by snow mold.
- (6) Fungicides applied as a Snow mold preventative are extremely helpful...it has been reported that fungicides applied to top dressing soils and/or organic nitrogen fertilizers provide longer lasting protection against attacks.

The first treatment is best applied just before the first real snowstorm is expected, if possible...another treatment during the middle of winter if the weather permits, and a third treatment in the early Spring.
- (7) Poa annua is usually harder hit by Snow mold than is bentgrass.
- (8) It is helpful to water greens in some manner when in danger of desiccation...some use the spray equipment to water at that time.
- (9) Some strains are less susceptible to Snow mold injury...the C-19 (Congressional) strain of creeping bentgrass is reportedly one of the more resistant grasses to Snow mold injury.

VERONICA CONTROL

Veronica filiformis -- on the increase in fine turf areas...this weed now has become more evident in golf course fairways and roughs in the past three years...fortunately there is a control for it. Dr. John Cornman and Robert G. Mower, Turfgrass Specialists from Cornell University, report complete control of Veronica with Endothal at the rate of 1 lb. actual Endothal in 50 to 100 gallons of water to the acre...they report that a single treatment anytime in the Spring or Fall when grasses and Veronica are growing normally, will satisfactorily control this weed pest.

FAIRY RING CONTROL

The Washington Agricultural Experiment Station has obtained satisfactory results with organic mercury compounds when used with a wetting agent. The following procedure is recommended:

- (1) Prepare a solution of 1/2 oz. of 10% FMA in 100 gallons of water to which has been added approximately 1 lb. of a laundry detergent.
- (2) Thoroughly aerate the infected area for at least 2 ft. outside of the green ring of grass. This can be done by hand forking or with an aerating tool. The soil should be opened as deeply as possible (5 to 6 in. minimum).
- (3) Apply the solution as a drench at the rate of 40 gallons per 100 sq. ft.
- (4) Treatments should be repeated at monthly intervals. If recommended concentrations discolor the turf, the concentration of repeat treatments can be reduced by one-third.

Note: FMA cannot be used safely on Merion Kentucky bluegrass. Where this variety is to be treated, a solution of 1/2 oz. of mercuric chloride or 1/8 oz. of cadminate per 100 gallons of water will provide partial control with deep aeration and retreatment.

Are We Using Our HORMONE TYPE WEED KILLERS Too Freely?

Weed killers 2,4-D and 2,4,5-T have indeed been a blessing to those engaged in fine turf management...broad leaf weeds and clover are no longer the serious problem they once were...such striking results are possible that we bring up the question, "Are we using these chemicals too freely, too often, and at too high a rate...are these materials being absorbed and translocated by grasses...and are they adding to our summer problems...are we getting a delayed fuse type action that explodes when summer temperatures soar...are they contributing to the collapse of Poa annua in the summer season...in July and August when we want most for it to persist?" We believe they are!

From observation in the field, we believe that on cool season grasses cut at fairway height...that 1/2 to 3/4 lbs. actual active ingredient is the maximum rate for safe use...especially if a fair percentage of Poa annua is present.

IT IS EASY TO LEARN SOMETHING
ABOUT EVERYTHING, BUT DIFFICULT
TO LEARN EVERYTHING ABOUT ANY-
THING. -- emmons

Eastern Turfletter

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