

COMMENTS ON  
TURF CULTURE

Issued By The  
UNITED STATES GOLF ASSOCIATION  
GREEN SECTION

P.O. Box 73, Benjamin Franklin Station  
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Executive Offices, 73 East 57th Street, New York, N. Y.



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P.O. Box 73, Benjamin Franklin Station, Washington, D. C.

Frank M. Hardt, Chairman of Green Section Committee

Dr. John Monteith, Jr., in Charge of Washington Offices

Executive Offices, 73 East 57th Street, New York, N. Y.

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## WINTER INJURY TO TURF

Northern Courses: The exceptionally cold weather this winter which prevailed for long periods over much of the country has caused considerable concern among golf course officials as to the likelihood of damage to turf.

The common grasses used on golf courses in the North are rarely killed by cold weather. Therefore, even the unusually low temperatures of recent months have in all probability not injured northern golf turf.

The extensive and heavy blanket of snow that covered most of our northern states did, however, provide conditions favorable for the development of snowmold in many sections. This type of injury is discussed in a separate article below.

The extremely cold weather in sections where there was little snow covering resulted in freezing the ground to unusual depths. Freezing of this type, contrary to popular belief, does not kill our common northern turf grasses. On the contrary, freezing of the soil has a decidedly beneficial effect from the grass standpoint.

Some golf club officials have entertained the hope that the unusually severe winter may have done great damage to the various pests of golf turf. Unfortunately, there is slim evidence to justify encouragement of that hope. No doubt all the little bugs and the fungi that cause diseases of turf during the playing season will be ready when the time comes to tee up for the usual summer's match against the greenkeeper and his team.

Injury to turf often occurs when ice forms in pools of water collected in poorly drained areas. This type of injury is expected to be less than that which occurs in years of frequent thaws. However, some of such damage may still develop on northern courses.

Southern Courses: Southern golf clubs, particularly those along the northern border of the Bermuda grass belt, are likely to find that the unusually cold weather this winter has killed much of the Bermuda grass. This injury is likely to be most common in turf that is kept cut close, as in the putting greens and the tees. Fortunately, in many sections the grass was protected from the most intense cold by a blanket of snow.

Clubs located in the regions where unusually cold weather prevailed without snow protection should be prepared to do extensive reseeding as soon as it is evident how much of the Bermuda grass has been killed.

An early application of fertilizer will prove of much value in thickening the injured Bermuda grass where the damage has not been severe enough to require reseeding. Light disking with the discs set as straight as possible, followed by dragging with a brush-harrow or other smoothing device and then rolling, will also serve to speed recovery.

#### SNOWMOLD DISEASE

It is likely that the injury from snowmold on golf courses will be far more extensive this year than it has been for several years. It has occurred this year on courses much farther south than where it is commonly found. The continuous cold no doubt prevented far greater damage to turf than might have occurred had there been the customary prolonged and gradual thaws during the winter. If ground is well frozen when the first snow arrives and the snow melts little during the winter, the snowmold has almost no opportunity to develop. Therefore, courses where this condition prevailed in general have suffered little from this disease this year.

In some sections of the country snow fell before the ground was frozen and the subsequent heavy falls served to insulate the ground from the extreme cold, with the result that the temperature at the surface of the soil was sufficiently high to permit the mold to develop. This was particularly the case under heavy drifts of snow. In such instances snowmold injury has been common.

In the case of many courses covered for a long period with a heavy blanket of snow, the cold weather continued until the rapid thaw in late February. This thaw removed practically all of the snow within a period of a few days, which permitted the disease too short a time to develop any serious turf injury.

Where all the snow did not disappear promptly during this thaw, there has been far more injury since snowmold is decidedly encouraged by gradual thawing.

Seaside bent as usual has been injured by snowmold in a general way far more seriously than have been the other bent grasses grown on golf courses.

At the time this is written the full extent of the damage from snowmold cannot be determined. The disease may develop for several more weeks under favorable climatic conditions.

Treatment for Snowmold: In many instances the turf has been completely killed in patches and these areas should be patched as early in the spring as possible. If this is impractical, the dead areas should be raked or disced lightly and seeded as soon as possible.

Where the disease has occurred it would be well to treat the turf with corrosive sublimate at once to kill the mold and prevent further spread in the event of weather favorable for its development within the next few weeks. This treatment will not restore turf already injured but will insure against extension of the damage.

Since much of the turf injured by snowmold is not completely killed, it will be restored as soon as new blades of grass are produced by the plants that have survived in the affected areas. A liberal application of fertilizer containing quickly available nitrogen as soon as growth starts will hasten the recovery of turf that has been thinned out by snowmold.

The late fall treatments with fungicides as worked out by the Green Section staff a few years ago have again demonstrated their effectiveness in preventing extensive damage by snowmold. It was recently estimated by a greenkeeper in the Twin Cities district that 90% of the putting greens in that region are given the fall preventative treatments as an insurance against snowmold.

Detailed directions for the prevention of snowmold are available in the Green Section Bulletins that have been sent to United States Golf Association member clubs.

#### WEED CONTROL TESTS

The Green Section is conducting a series of tests with chemical weed-killers in cooperation with golf clubs throughout the country. These tests are made principally with the purpose of controlling fairway weeds. Many tests at the Arlington turf garden and elsewhere have given results that warrant more extensive tests. If any member club is particularly interested in this work and wishes to cooperate or to keep in touch with the tests being conducted in its neighborhood, we will be glad to furnish full information.

#### SEASONAL REMINDERS

Overhauling Equipment: On northern courses the winter is the best time of the year for overhauling and repairing equipment. Unfortunately on many courses little or no provision is made for winter work of any kind. Where this type of work has not been done already no time should be lost in attending to it.

The best time to make major repairs is when there is sufficient time to put a piece of equipment out of use long enough to do a good job. Thorough overhauling of equipment during the winter and spring months often saves much time, money and unpleasant situations caused by breakdowns during the busy playing season.

The reduced budgets of recent years have made it necessary to use much of the equipment on golf courses beyond its normal span of usefulness.

Replacing Equipment: As overhauling is being done a complete appraisal of equipment can be made. Practical limitations on repairs should be recognized and worn-out equipment should be replaced at once.

It is important to recognize the possible life of machines at this time of year rather than to wait for them to break down just before an important tournament or when they are being overworked during the busiest season even without a tournament.

A thorough inventory not only of the major equipment but also the smaller items, such as flag-poles, cups and rakes, should be made. If this has not been done during the winter, advantage should be taken of some of the bad weather in spring, when regular work is held up, to make such an inventory. An order for replacements now and a little repair work and painting will save many delays and complaints during the rush days soon to come.

Information: While referring to overhauling and repairs of course equipment, it is well not to forget the most important piece of equipment used in maintaining a modern golf course - the greenkeeper's mind. Perhaps there are a few worn-out or antiquated parts there in the form of theories or so-called practical ideas. Perhaps some of these ideas had better be scrapped and replaced, others may need only a few repairs and adjustments, while others may need simply a little polishing and sharpening by rubbing against similar ideas from other minds, either through personal contact or through the printed page.

The club assumes the bill for the parts and replacements in the moving equipment for the course, so why not include at least part of the expense involved in improvements in the mental equipment to be used on the course?

Library: It is argued that the particular piece of equipment mentioned above does not belong to the club and may leave at any time. Regardless of the merits of this contention, there seems no reasonable argument against the club assuming the bill for a reasonably good collection of books, bulletins and pamphlets to become a permanent part of the greenkeeping equipment. Throughout the season a modern greenkeeper who knows how to use books will find plenty of occasions for a handy library.

The Green Section office is always glad to furnish suggestions as to suitable books or pamphlets on the various subjects pertaining to greenkeeping.

Pruning Trees: There still remains a short time to prune trees before the leaves come out on our northern courses. Winter and early spring are the best times for pruning trees. At that season there is time to do a careful job and the litter is not as objectionable then as in the season of heavy play. Also, there is less time consumed at that season in explaining to members that there is no intention to cut down everything but merely to prune to advantage.

Air Circulation: Much of the extensive loss of turf throughout the Middle West last summer served to emphasize further the importance of adequate air circulation over putting greens and tees. Before the playing season is in full swing necessary tree pruning should be done with a view to reducing such damage to turf next summer.

Planting Trees: Thinking of thinning trees serves as a reminder that there is still time to plant a few more trees. It is not necessarily contradictory to be thinning branches or even cutting out trees at the same time one is planting new ones. There are proper places for trees on every golf course.

Drainage: During the wet periods in the spring when work is delayed there should be a thorough checking of low areas where water stands on the course, particularly on putting greens. Diagrams or careful notes will serve to remind the greenkeeper of the most important low areas so that at the earliest opportunity they may be properly drained or the sod lifted and replaced after the depression is filled.

Low areas on golf courses are too often handled in much the same manner as the leaky roof of the shiftless home-owner; namely, in wet weather the job cannot be done and in dry weather it is not needed. A well-done job of lifting sod and filling in low areas in the spring may prevent a big dead patch of turf in the middle of summer when play is heaviest and when there is even less time to do the job than in the spring.

Southern Greens: On Southern courses with putting greens of ryegrass or redtop for winter play, brownpatch at this season becomes more active. Treatments with the mercury fungicides will help materially in retaining the winter grasses in good condition for a longer period until the warmer weather provides favorable growth conditions for the Bermuda grass.

Spring Seeding: Late summer or early fall seeding of northern grasses is much to be preferred to spring seeding. However, good stands of grass may be obtained by planting at any time of the year. Where turf is sufficiently thin to justify reseeding, it is advisable to seed in the spring at as early a date as possible.

Fertilizing Fairways: Those clubs which contemplate fertilizing fairways this spring should do so as soon as possible, especially if the turf is ordinarily heavily infested with crabgrass. Fertilizer should be applied more liberally in the fall than in the spring where crabgrass is an important pest.

Closing Greens: Putting greens that are not well drained and which are built with soil that tends to puddle badly when wet should be closed during the spring when soft and saturated with water. Sandy or well-drained greens are not seriously injured at such times. When not practical to close greens during wet periods, it is well to at least place the cup near the front corner of the green so there may be as little trampling as possible across the whole green.