

ASK ABOUT WINTER-KILL

By V. C. DOERSCHUK

Questionnaire to North-Eastern clubs brings helpful data on damage.

THE extensive turf damage of the 1933-34 winter, which required on some courses the seeding or sodding of 50% or more of the greens, instigated a questionnaire which was sent to 19 golf clubs relative to this subject. The subject is important not only because of the expense involved but also because of the delay experienced in again having playable greens. The number and location of the courses consulted: Northern New York 8, Ontario 7, Quebec 4. All who were consulted showed a deep interest and concern in the subject.

The summary of the answers to the questions asked is given below:

1. *Do you treat greens in the fall for snow mold; what treatment is used?*

Eight courses answer "No," 11 "Yes." Varieties of treatment: (1) Calomel 2/3 and bichloride of mercury 1/3, using 3 oz. per 1,000 sq. ft., applied with sand. (2) Bichloride of mercury spray. (3) Semesan spray. (4) Most of the clubs use 3 oz. bichloride of mercury per 1,000 sq. ft., mixed with equal parts of sal ammoniac to increase the solubility of the bichloride, using no more than 3 oz. bichloride in 50 gals. of water. The above treatments are put on as late as possible before the first snow in the fall, some say after the first killing frost. One comment was that since snow mold forms only at certain temperatures close to 32° F., and when the snow is melting, that the melting snow should be brushed off the greens with street cleaners' brooms, otherwise the jelly-like slime on top of the snow will dry leaving the mold on the grass in patches resembling cobwebs. If this is not brushed off the grass it turns yellow in spots and dies. Other comments are that a heavy topdressing should be used late in the fall; that fertilizers should be omitted after August 15 or September 1, otherwise the grass makes a lush growth which is susceptible to disease; that the greens should be kept free from matting in the fall; that after August 15 the mowers should be lifted 1/8 in. compared to ordinary cutting so that the grass will become more

hardy before winter; that the greens subjected to snow mold are usually the sheltered ones.

2. *Are shallow trenches cut into the greens, after playing stops, to provide drainage from low spots?*

"Yes," 10; "No," 9. All those who use this method report favorably except one. Some who answer "No" report that the greens are so well sloped that further drainage is not necessary. The common method is to cut a trench 6 in. to 12 in. wide, lift the sod 2 in. or 3 in. deep laying it on the edge of the green, the pieces being in order so that they will fit in when replaced in the spring. The trench is then left as is or deepened. No trouble is experienced by the sods not growing in the spring when replaced; in fact in a number of instances this sod grows better than that in the vicinity of the trench. The sods have been well drained while out; the sod left in place was not so well drained.

3. *Is ice and snow removed in the spring, or is nature allowed to take its course?*

"Yes" 12, "No" 7. Those who follow this practice report favorable results. Some comments: Ice is taken off as thick as 6 in., thus letting air to the grass and roots. This facilitates spring drainage. Ice and snow are removed during each thaw; after removal the greens are swept. Ice is removed where the green is exposed to the sun so as to prevent a lens action which results in burning.

4. *Are the greens covered with straw, brush, leaves, etc.?*

One reports that leaves are being tried, placed on the greens after the ground freezes. 18 report "No." Numerous ones report that this has been tried with disastrous results. One reports that where snow

stays on throughout the winter, brush is placed loosely on the greens to act as a snow catcher, but no matted brush should be used.

5. *Do you use snow fences, to increase thickness of snow cover on the greens?*

"Yes" 5, "No" 14. One course uses fences 4 ft. high and 2 fences per green in order to catch more snow, one uses 2 or 3 fences 3 ft. high held by stakes driven into the green. Favorable results are reported. Several report snow fences properly placed to prevent an otherwise heavy drift on the green from natural causes. One reports that where snow fences with horizontal slats are used a trench void of snow is formed along the fence. This trench could be shoveled full of snow, or a better design of fence would prevent this. One reports that snow fences are very important for windswept greens. Some who report "No," say that greens naturally receive plenty of snow normally. Snow fence design and placement can be improved by consulting highway and railroad authorities who place miles of fence each winter.

6. *Which greens give the least trouble from winter-kill?*

Well sloped and sub-drained, 10. Sheltered, 5. With thick snow cover, 4.

Those which gave the most trouble are: Where snow blows off easily, or where the greens are most exposed, 7. Poorest drained, 2. Where most water collects, 2. One reported that the best sloped green suffered badly. This was exposed to wind, and no doubt had little snow cover.

7. *At what length of grass is mowing stopped in the fall?*

Same as during playing season, 1.

½ in., but 1 in. after October 1st, 3.

½ in. more than normal, 3.

1 in., 4.

2 in. to 3 in., 1. (This probably refers to fairways—Ed.)

Mower raised after September 1st, no cutting after October 1st, 1.

Grass should be longer than normal after September 1st, but no matting should be allowed to form, 6.

Many say to leave the grass as long as playing will allow.

8. *Does length of grass when the playing season ends affect winter-kill, or conditions of the greens in the spring?*

"Yes" 15, "No" 4. Those whose answer

was "yes" are in favor of longer than normal length of grass, and believe that this protects the roots, allows the grass to attain more vigor before winter, and decreases snow mold tendencies. Since root growth is promoted by length of leaf, these viewpoints seem quite pertinent.

9. *What kind of greens' grass withstands winter-kill best?*

Seaside (Coos County), 5; Creeping Bent, 4; Rhode Island, 2; Fescue, 2; South German, 1; Velvet, 1; Washington, 1; P E I Bent, 1; Columbia Stolons, 1; a native bent, 1.

One club reports Seaside not satisfactory. One club, in St. Lawrence County, N. Y., found a native bent in pastures and fairways to withstand winters best and to be a good serviceable grass. This was taken up as sod and placed on the greens. This was identified as a Washington or Metropolitan Bent.

One club reports that greens 3 years or more old withstand winter-killing better than younger greens. This is probably related to the root growth, and points to taking better care of young greens.

10. *How are winter-killed spots repaired?*

Answers were rather general. Seeding, sodding, and planting of stolons are the usual methods. Which to use depends on time available (sodding gives a playing surface first, seeding last); the size of the area, the sod available, the season, and the probable response of the method chosen. Several report using at least 1/3 redtop when seeding in order to get a quick start, and in order to protect the other seedlings. Some report that it is difficult to decide when grass will and when it won't recover from apparent killing and that in this way time has been lost in waiting for a showing by the grass.

11. *Miscellaneous comments.*

(a) Eliminating low spots always advisable.

(b) Cut out the features and fads. Good golf players do not ask for billiard tables. (Believe he refers to special grasses, fertilizers, experiments, etc.)

(c) The hollows suffer most. They collect the most water and fertilizer in the growing season and look the best then. Seepage in the hollow helps to compact the ground there; acidity follows. Frost sets in and seals the hollow to air so that the turf is choked bottom and top.

(d) At times the grass looks fine early

(Continued on page 32)

Next Rebate SEPT. 20TH!

●
Settle your Penfold
account before the
19th of September
and get your check
the day after.
●

No receipted bills necessary

PENFOLD

Main Office—11 Park Place, New York

Chicago
218 S. Wabash Ave.

Cleveland
2000 West 14th S.

That Happy Combination of Quality
and Economy is offered in our

New Broadmoor One-Color Score Card

Produced by a New Process, its price is \$21 for 5,000. The card, fully complete and comprehensive, is not small and the stock is heavy.

Samples to clubs on request

JOHN H. VESTAL CO., Printers
703 South La Salle Street - - - Chicago

A Boon to Clubmembers . . . ✓

A MONEY MAKER FOR YOU
LEXOL THE SELF-PENETRATING
LEATHER CONDITIONER

Help your members restore new life to leather bags, luggage, shoes, club grips, etc. Remove dirt from wet leather, then apply LEXOL to ensure drying soft and pliable. Special prices to pros. In 2 oz., pint and gal. sizes. FREE COUNTER DISPLAY with first order. Ask your supplier or write us.

MARTIN DENNIS COMPANY
857 SUMMER AVE., NEWARK, N. J.

WINTER-KILL

(Continued from page 18)

in the spring, but by May winter-kill will develop.

(e) Use no highly soluble inorganic fertilizers after September 15.

(f) As early as conditions permit in the spring, roll the greens to press the roots into the soil before they dry out. Frost loosens the roots in the soil.

(g) On those greens where snow, ice or water lays late in the spring, winter-kill is most severe.

(h) It takes too long using seed in the spring for turf to mature. Use sod with topdressing and plenty of water to get quick results.

(i) Covered half of the greens with heavy straw, leaves, branches, etc. These halves killed as quickly as the halves not covered.

(j) Some winter-kill is caused in the late spring by snow melting on the greens under a warm sun, then freezing at night. When the sun strikes this ice it acts like a lens and burns the grass underneath.

(k) When seeding in the spring, be sure that the dead grass mat is removed, and a good soil bed prepared for the seed. Use spading, if necessary.

New Sport Volume Touches Briefly on Golf

Sports for Recreation. 460 pages. \$2.50. Prepared by the Department of Intramural Sports, University of Michigan; edited by Elmer D. Mitchell. Published by A. S. Barnes & Co., 67 W. 44th st., New York City. The book should—and probably will have—a wide influence in high school and college sport planning. Due to the many fields of sport covered it neces-

FALL FEEDING gives healthier turf in the spring and more of it! FERTILIZERS

Complete stocks of most popular brands. Immediate shipment.

Write for quotations.

J. OLIVER JOHNSON, Inc.

World's Largest Golf Supply House
940 W. Huron St. Chicago

Tell us any idea for making GOLFDOM advertising more helpful