



UNITED STATES GOLF ASSOCIATION GREEN SECTION

Mid-Continent Turfletter

MID-WESTERN DISTRICT
ROOM 241, LASALLE HOTEL
CHICAGO 2, ILLINOIS
TELEPHONE: STATE 2-7485

SOUTHWESTERN DISTRICT
TEXAS A&M COLLEGE
COLLEGE STATION, TEXAS
TELEPHONE: VICTOR 6-5210

No. 4

August - 1959

DR. MARVIN H. FERGUSON
MID-CONTINENT DIRECTOR
NATIONAL RESEARCH COORDINATOR

JAMES L. HOLMES
MID-WESTERN AGRONOMIST

JAMES B. MONCRIEF
SOUTHWESTERN AGRONOMIST

HOW TO DEAL WITH WINTERKILL

Turf in the Midwest suffered severely from "winterkill" this winter and spring. Recovery has been discouragingly slow. In the lower part of the Midwest a cover of ice which persisted for a number of weeks killed out large areas of Poa annua and some bentgrass. Further north a severe drought was responsible for extended damage to both Poa annua and bentgrass. It has been our observation that watering practices and greens aeration have held the key to recovery. It seems, in most cases, that the nodes or joints of bentgrass were not killed. However, in the majority of cases a mat or thatch which dries quickly was present. Where the following program was diligently followed recovery was much faster and more complete:

1. As soon as possible the watering system was put into operation.
2. Deadened, brown areas were syringed as often as 3 to 5 times daily especially during times of a dry wind.
3. Nodes from which new growth is initiated continued to grow and live if kept moist. If allowed to dry, as they will in a short time when a mat or thatch is present, the node growth failed to survive, thus the area was completely dead and recovery could only be made from Poa annua and other seeds which were introduced.
4. Early and frequent aeration in weakened areas seemed to assist the turf recovery. In as little as 3 days, if the matted turf was kept constantly moist, green tufts of bentgrass could be detected around the aerifier holes.

If another severe season happens along it would be well to remember that thorough aeration and proper watering seemed to aid recovery more than any other factors. The watering program followed should be similar to a syringe program during hot weather.

Spray rig innovation

Clarence White, superintendent at Orchard Lake Country Club, Orchard Lake, Michigan, has developed quite a spray rig for treating greens. Mr. Si Thingstag, a member of the greens committee, conceived the idea after reading about a similar device while perusing an issue of the old "Greenkeepers Reporter." Six spray nozzles about 12 inches apart and placed on a 1/2-inch copper line form the spray pattern. The copper pipe with the nozzles is attached to a caddy cart so that the nozzles are about 10 inches above the surface of the area to be treated. A line is attached to the power sprayer with the shut-off valve located on the caddy cart handle. Mr. White reports that he is able to treat a 6000 square foot green in less than 4 minutes and obtains a complete and thorough cover.

Nematocide helps in Minnesota

Emil Picha, the superintendent at Oak Ridge Country Club in Minneapolis for these many years is eminently successful but he continues to try new ideas. In 1955 Emil treated one half of what is now the number 9 green at Oak Ridge with VC-13, a nematocide. The following spring the treated half was covered with a turf superior to that on the other half. The difference has been noticeable ever since. This year the difference is quite outstanding. The treated half supports a vastly superior turf in relation to the nontreated half. No Poa annua is present, the bent is thicker and has a more healthy vigorous appearance.

Early season injury overcome

Mr. Dudley Smith, new superintendent at the Silver Lake Golf Club, southwest of Chicago, rates a pat on the back. He has done an excellent job of restoring Silver Lake's severely injured putting greens.

In 1958, Silver Lake Golf Club was host to the USGA Amateur Public Links Championship. The course was in excellent condition. However, some greens were rather heavily infested with Poa annua. Last fall, all 36 greens were treated with calcium arsenate at the rate of 11 lbs. per 1000 sq. ft. Apparently the combination of the effects of this treatment and an ice cover which persisted this spring were responsible for the loss of turf on most of 35 greens.

Mr. Smith and Mr. John Coghill, owner of Silver Lake Golf Club, undertook a program of aeration, spiking, seeding, plugging, and judicious use of fertilizer and water. Through much hard work and persistence they have succeeded in getting the greens in good condition.

Incidentally, both Mr. Smith and Mr. Coghill have had excellent training in turfgrass maintenance. Mr. Smith is a Penn State graduate while Mr. Coghill is an alumnus of Prof. Dickinson's turf school at the University of Massachusetts.

Adversity Shows Up Weaknesses

Weather this past winter and spring has been odd, unpredictable and severe. Seeds, in many cases, have failed to produce plants and recovery of damaged turf has been discouragingly slow. It seems that during the past 4 or 5 seasons we have heard an increasing number of complaints and comments about damage of some sort or other to putting surfaces and the inability of the turf to heal or recover from damage. It is entirely possible, in most of these cases, that greens which were designed and built 20 to 40 years ago for a small amount of play, perhaps no more than 50 to 70 rounds a week, are simply unable to stand up under present day demands of 200 or more rounds a day. Reasonable cupping areas on many of these old greens are restricted to one or no more than three areas; soils are layered, hard and compact; surface and subsurface drainage is limited or nonexistent. Is it not true that Poa annua and other undesirable species of plants have encroached and covered the most used cupping areas?

Consideration of these various factors reveals the reasons why it is becoming more and more difficult to maintain greens in top shape. The conditions are such that greens just cannot stand the "traffic."

Many clubs faced with conditions and circumstances such as those described have initiated and are following a long range redesign and rebuilding program. Perhaps the time is ripe for other clubs which have greens problems to consider a rebuilding program. Through basic research sponsored by the USGA Green Section, we have acquired a greater knowledge of the factors which must be considered in the building of a green. This knowledge permits the construction of greens so that they continue to provide drainage and to resist compaction. Anyone planning to rebuild greens should investigate the latest methods and information available before proceeding. This undertaking, especially when considering the heavy and constant traffic a green is expected to support, has ceased to be a "hit and miss" or "guess work" project. If you are not a subscriber to the Green Section Visiting Service and are interested in obtaining more complete information on methods of building greens, contact one of the offices listed on this letterhead.

DATES TO REMEMBER

- September 14-15 ----- Midwest Regional Turf Foundation Field Day
Lafayette, Indiana
- September 29 ----- St. Louis District Field Day
- October 1-2 ----- Arizona Turfgrass Conference
University of Arizona, Tucson, Arizona
- October 5-6- ----- New Mexico Turfgrass Conference
New Mexico A. & M. College, State College, N. M.
- October 21-22-23----- 10th Central Plains Turfgrass Conference
Manhattan, Kansas

Mid-Continent Turfletter

USGA GREEN SECTION

BULK RATE U. S. POSTAGE PAID College Station, Texas Permit No. 80

Dr. J. R. Watson, Jr.
Chief Agronomist
Toro Mfg. Corporation
Minneapolis 6, Minn.