of ¼ lb. nitrogen per 1,000 sq. ft. The rate of application decided upon for the seedling grasses was 1/16 lb. nitrogen per 1,000 sq. ft., which is somewhat comparable to "eye-dropper" feeding. Two applications were applied at weekly intervals just prior to each tournament. The turf seemed to respond just in time for each contest.

During visits to the many courses affected by winter-spring injury, the question was often asked, "How about sodding greens?" Most turf specialists do not object seriously to the sodding of greens; in fact, some of them encourage it because replacing the brown turf with some green turf makes sense to them. However, the Green Section's Northeastern staff members have always opposed sodding except as a last resort, because it usually takes the remainder of the season to bring sodded greens around to be fairly good putting surfaces. It is extremely difficult to sod smoothly and to keep sod level and true in cupping areas when heavy play is immediately imposed. We have known it to be successfully done, but this has been the exception, not the rule.

Not one square foot of sod was used at Westchester Country Club or at The Country Club, and each was as severely injured as any we had inspected. In fact, as fate would have it, they were more seriously injured than most clubs visited, when it meant so much to them to come out of the winter relatively trouble-free. Going into the winter, each course was in superb condition, and a normal winter-spring season would have kept the turf in superb condition. Until we can do something about weather, winter-spring injury is one of the more serious hazards we face in the management of golf turf in the Northern areas.

Eighteen Alternate Greens

By A. M. RADKO, Eastern Director, Green Section of the United States Golf Association

The increased use of the golf course makes maintenance more difficult, costly, and time-consuming. Since labor is the major budget item, idle time is costly time lost. Maintaining a course "in between foursomes" not only adds to the total cost but also reflects in over-all maintenance. Required work on greens is the most time-consuming and costly item. Greens require more care than other parts of the course. More interruption to work takes place on greens also because this is the focal point of all play on each hole as half the game of par golf is played on greens. When golfers tee off from early morn and play until sunset, required major tasks are often deferred or left undone. Maintenance then becomes geared to play, and not to the best interests of turf itself.

The Belle Haven Country Club in Arlington, Va., was faced with this very problem—more and more play, and less and less time to maintain, let alone do anything to improve the turf. At that time, Jack Wilson, Chairman of the Green Committee; George Campbell, Superintendent, and John Howard, Club President, got together to see if they could do anything about it. Their decision was to build small greens in close proximity to every one of the regular greens on the course.

The small greens measure 300 to 400 sq. ft. in size so they are not a real costly item to manage. (See Photo 1) They are mowed and treated like the regular greens, except for irrigation. They are watered infrequently but deeply, as most would like to water regular greens.

Each alternate green is only slightly elevated. Mr. Campbell used only one load of topsoil to build them. He graded each so as to provide surface drainage and they contain no contours. Each green is level or as nearly so as possible except for a slight pitch to the front. The alternate greens are used for

Photo 1. George Campbell stands on alternate No. 11 green. It is seven clubs wide and approximately the same length.

Photo 2. The regular No. 11 green is in the foreground while Mr. Campbell stands on the alternate; note the relative sizes.

winter play, or when regular greens are closed because of inclement weather (thundershowers or thawing of the soil or overly wet soil or frozen turf, etc.), or when regular greens are being aerated, topdressed, seeded or undergoing some other major treatment. Mr. Campbell normally aerates three regular greens in one day and so he will take these three out of play and place the pin on the alternate greens. Everyone plays them so the course will be the same test for all, 15 regular and 3 alternate greens. The regular and the alternate greens for the eleventh hole are shown in Photo 2, indicating their relative sizes. These alternate greens provide excellent putting surfaces and members don't complain, possibly because they can try their putting skill as they do on regular greens.

Public Course Interest

Heavily played county municipal courses also have been experimenting with the alternate green system. Superintendent Ken Morrison and Superintendent Ed Brittain of the Union County courses, and Jerry DeRosa and Superintendent Harold Loescher of the Passaic County Course in New Jersey are experimenting with a few alternate greens. Because of extremely heavy play during the entire year, it appears that the alternate green system has considerable merit for them. They, however, build their alternates closer to 1,500 sq. ft. due to the extremely heavy play on their courses. If accepted by their players, they hope to provide a few more each year until there is one regular and one alternate green for each hole.

COMING EVENTS

September 25-27
Northwest Turfgrass Conference
Thunderbird Motel
Portland, Oregon

September 30-October 1
Annual Rocky Mountain Regional Turfgrass Conference
Colorado State University Campus
Fort Collins, Colorado

October 16-18
Central Plains Turfgrass Conference
Kansas State University
Manhattan, Kansas

November 18-22
American Society of Agronomy
Annual Meeting
Denver, Colorado

December 2-4
Oklahoma Turfgrass Conference
Oklahoma State University
Stillwater, Oklahoma

December 9-11
Turfgrass Conference
Texas A&M University
College Station, Texas