FAIRWAY TURFGRASSES IN THE NORTHEAST

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Permanent turfgrasses for fairway use on golf courses in the Northeast are limited to a select few. Classified in general categories, these include bentgrass, bluegrass and the fescues. Each of these grasses will do a creditable job of forming turf in this region when maintained and managed according to its individual requirements. How do the individual requirements of these grasses measure up to fairway requirements for good golf?

The golfer judges fairway turf purely and simply from the standpoint of the type of lie it affords him in playing his shot. The average golfer usually prefers to see the ball resting on top of the grass, sitting up so that he can use a No. 2 wood whenever he chooses.

Translated into turf terms, the golfer's ideal turf is one that is dense, firm and closely mowed. Only a turf of this description will keep the ball teed where the average golfer can get the club to the ball. When nestled in tall grass, the psychological block is usually an insurmountable barrier for the average player.

The bluegrasses, fescues and bentgrasses, when managed and maintained according to their individual requirements, form a dense and firm turf in the Northeast, but only the bentgrasses are adapted to close mowing. It follows, therefore, that the bentgrasses should, and do, play a prominent part in the establishment of fairway turf in the Northeast.

The Merion strain of the bluegrass group has been used on a limited scale as it, too, can withstand close mowing. While Merion bluegrass has performed well at research stations, it has been met with mixed feelings under practical fairway tests. The cost of seed, the fertility requirements, the difficulties encountered in introducing it into established turf areas, and the rust question have been factors leading to the superintendent's indecision.

In this region where fairways were seeded



Next to golf clubs, mowers are perhaps the most used implements on any golf course. Here is one of the early hand-made tractor models which was used at the Indian Hill Club, Winnetka, Ill., about 1922. In a letter dated January 31, 1922, Alfred E. McCordic, then Chairman of the Green Committee of the Indian Hill Club, wrote the following in response to a Green Section questionnaire on tractors and mowers: "Our mechanic, G. A. Holste, after long experience with horse mowers and experimental tractors, built this model. The tractors push the mowers, thus enabling the operator at all times to observe his machine and his work. We think it is a great advantage to cut the green before it is pressed down by tractor wheels. The tractor and mowers weigh about 1,200 pounds. Tractor wheels are 30 inches in diameter by six inches wide. The machine has a four-cylinder Universal motor equipped with Bosch magneto developing 15 horsepower at 1800 r.p.m., using one quart of gasoline per hour and one quart of oil per day. We operate at a speed of five miles per hour. Repairs on the tractor have been less than \$20 per year. This tractor cost us about \$800 to build."

to many so-called shot-gun mixtures in early days, the bentgrasses have best survived the close-mowing requirements, approximately 3/4 inch, demanded by golfers during the past decade. Bluegrasses and fescues in general have thinned or have been completely eradicated under close mowing. On golf courses with fairway watering systems the bentgrasses have far

excelled the performance of bluegrass, while the fescues have disappeared completely.

Highland Colonial Bent

In general, fairways that were originally seeded to a shot-gun mixture containing a good percentage of bentgrass have fared best over the years. Where the percentage of bentgrasses was small, many superintendents have overseeded fairways with bentgrass in their long-range program of improvement. Recently Highland Colonial bentgrass has been used more widely, as it has many desirable qualities which measure up to the rigid requirements of fairway turfgrasses under today's heavier play.

A good program of feeding is necessary to the performance of any perennial turfgrasses. During the 1954 season it has been my observation that fertilizers applied within the bentgrass growing season have generally produced best stands of permanent fairway turf. Feeding with soluble nitrogen too early in spring or too late in fall usually gives Poa annua the edge it requires to be troublesome. In an "Open letter to the Midwest Association of Golf Course Superintendents" which was published in the September, 1954, issue of "The Bull Sheet," USGA Green Section, Western Director Charles G. Wilson advocated the use of true organic nitrogen fertilizers in spring. This coincides with our observations in the Northeast; organics applied in spring benefit the permanent grasses, help them over the summer months through slow, steady growth and don't add to the mowing difficulties in the spring rainy season when mowers normally are kept in operation continuously to stay ahead of growth.

TURF MANAGEMENT

The book "Turf Management," sponsored by the United States Golf Association and edited by Prof. H. B. Musser, is a complete and authoritative guide in the practical development of golf-course turfs.

This 354-page volume is available through the USGA, 40 East 38th Street, New York 16, N. Y., the USGA Green Section Regional Offices, the McGraw-Hill Book Co., 350 West 42nd Street, New York 36, N. Y., or local bookstores. The cost is \$7.

Additional applications are necessary which should include at least one balanced fertilizer application within the bentgrass growing season, preferably in early fall before the new crop of *Poa annua* begins growth.

In the southern portion of the Northeast (approximately from Trenton, N.J., southward) and in temperate portions of Long Island, the U-3 strain of Bermudagrass generally has been performing satisfactorily where it has been tried. Plantings of U-3 Bermudagrass have primarily been made on some courses with sandy soils, where greater difficulty was experienced in growing cool-season turfgrasses. For the most part, U-3 plantings have been limited in scale, and only a small part of the over-all picture in the Northeast. Here the growing season for U-3 Bermudagrass and other warm-season perennial grasses is short, and generally the cool-season grasses, maintained and managed according to their specific requirements, are performing nicely for northeastern superintendents.

26th NATIONAL TURFGRASS CONFERENCE AND SHOW

THE Golf Course Superintendents Association of America will produce its 26th edition of its Annual National Turfgrass Conference and Show at the Jefferson Hotel, St. Louis, January 16 through 21. The hosts for the conference and show will be the members of the Mississippi Val-

ley Golf Course Superintendents Association.

The features of the conference will include the equipment show, where manufacturers of products and equipment related to the turf industry will exhibit their latest machines and materials for better