

1953 Shows Marked Trends in Turf for Tees and Fairways

By O. J. NOER

IT IS BECOMING increasingly difficult to grow and keep good turf on tees, especially in the transition belt from Philadelphia and Washington across to Kansas City. The belt passes through Cincinnati, Louisville, and St. Louis. In some cases tees are too small for the ever increasing amount of play, but lack of a good grass is the principal reason. Common bluegrass, fescue, and even the colonial bent grasses are overpowered by crab grass and goose grass during the hot summer months. Then *poa annua* takes over and becomes an added problem. It provides good cover during the cool parts of spring and fall, but surfaces become abominable with the onset of hot weather. The *poa annua* melts out and tees become bare ground with patches or a solid mat of crab grass. The presence of goose grass, which is very common in this belt, makes the tees even worse for play.

Some of the better vegetative strains of bent, and even seaside bent have provided better turf on tees in this belt and farther north than any other cool season grass including colonial bent grass. Brown patch is the chief prey and the principal drawback to the use of bent grasses. Most colonial bents are very susceptible, seaside is intermediate, and the other creeping bents vary widely in this respect. Many clubs think creeping bent tees too costly because of brown patch during hot weather. That point is debatable if the tees are kept a bit on the dry side, and if a good single strain is used, or the combination of Arlington, Congressional, and Collins.

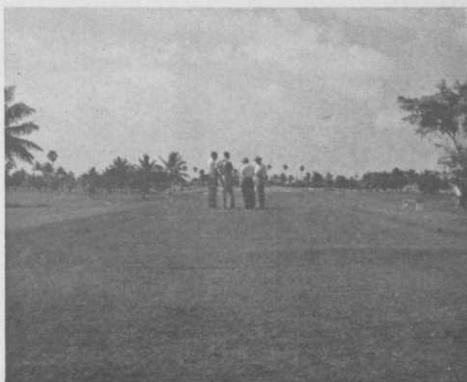
In the region from New York to Chicago and to the north, more clubs are turning to the creeping bents for tees. Beverly CC in Chicago is one example. In Milwaukee, Brynwood and Milwaukee CCs have had good Washington bent tees for more than twenty years. Visiting golfers remark about their excellence despite heavy play, especially at Brynwood. The secret is to cut close and keep the tees on the dry side especially over the week end. Some clubs put rye grass seed alone, or mixed with a little seaside, in the divot marks every Monday.

The seed is mixed with damp compost. A small handful is thrown into each divot mark and pressed into the soil by the workman's foot. The rye is up in several days, but the underlying bent recovers soon thereafter.

Before the last World War *Zoysia Matrella* was used extensively on tees in the Louisville area. *Zoysia* spreads so slowly that plugging into existing turf was not a success. It was necessary to sod the entire tee with turf from a nursery. Best results were obtained with early summer sodding. Common practice was to remove twelve-inch strips of sod from the nursery. By leveling the surface with soil and using the alternate strip the next year this method provided sod strips year after year.

Swing to U-3 Bermuda

For some years the *Zoysia* on these tees was extremely good and vastly better than any grass which had been tried up to then. Marked deterioration occurred during the



A properly constructed and well turfed tee. This is what golfers like and admire.

war. It was ascribed to nitrogen starvation and neglect. A decided improvement took place after the war. But before long the *Zoysia* started to weaken, and as a consequence, lose its popularity. Since then the swing has been toward U-3 Bermuda in this and other places in the transition belt.

Various theories have been advanced for the progressive weakening of *Zoysia*. Some blame winter traffic, others believe the me-

chanical defoliation from play during the dormant season gradually depletes the plant of its stored food reserves. The effect is the same as too close mowing. The weakening is a gradual one over a period of several years. It resembles the defoliation of trees by insects. Defoliation once does no apparent damage, but when it is a recurring affair each year, the tree eventually loses its struggle for continued existence.

Zoysia survived long enough to demonstrate its possible worth. Some of the newer selections appear to make a better type of turf, and even better ones are on the way. Shade tolerance is a Zoysia virtue which is important in Bermuda grass regions because Bermuda is not suited to shade, not even partial shade. Summertime use only



This kind of tee makes golf play a chore. There is no permanent grass left. Cover in Spring is *Poa annua* and crab grass and goose grass in summer.

may be the way to keep Zoysia tees in good condition. That means alternate tees for winter play.

The trend in the transition belt seems to be toward U-3 Bermuda, or other similar cold tolerant strains which make a tight turf. The Bermuda can and is being introduced by plugging, or by inserting narrow strips of turf into the existing grass. June is the best time in most sections, because hot weather starts during that month. Coverage should be complete by late August if the plugs or sod strips are not more than a foot apart.

Some players have complained about the playing qualities of the U-3 Bermuda. Lowering the height of cut stopped that. Close cutting is necessary to keep a firm even turf with all of the Bermudas that make a tight turf. They are like the creeping bent grasses in that respect.

Of the Bermuda selections, U-3 looks best for use on tees in the transition belt. Al-

though seemingly winter hardy, there is evidence to support the belief that tees of it will not survive more than a few seasons if kept in play during the winter. Many who have used it are convinced that this is a fact. They are placing the U-3 Bermuda on a part of the tee which can be roped-off or covered to prevent its use in winter. Others plan to have alternate tees, and a few put the marker at the front of the tee for winter play and resod the area in the spring with U-3 Bermuda turf from the nursery.

In the Deep South some clubs are forsaking common Bermuda and are using improved strains on the tees. In South Florida the Ormond and Gene Tift strains have provided superior turf. The Tifton 57 strain has been satisfactory in the few places where it has been used. All these better grasses have been vastly superior to common Bermuda.

In the so-called northern belt with the New York to Chicago line as the southern boundary, there is nothing to justify the large scale use of Bermuda grass and Zoysia also for that matter on tees. These grasses are more apt to winterkill than survive during the average winter, and are bound to suffer in a severe one. Bermuda



A fine cover of a local Bermuda grass selection in St. Louis.

and even Zoysia will not provide green turf for more than a few weeks in mid-summer. The better cool season grasses are vastly better and offer greater advantages.

Merion blue grass has been tried on tees at various places. In some instances it has done well, but others report that the Merion is disappearing gradually. Seeding Merion into turf of other grasses or using it with bent seed has not produced satisfactory stands of Merion. For best results, Merion should be used alone, as seed or sod from a nursery.

Selected Bent Strains in North

Clubs are beginning to realize that tees must be of sufficient size, and that best design provides banks and slopes which can be mowed with fairway units or a tri-plex mower. In the Deep South clubs are starting to use improved selected strains of Bermuda. They are testing the better Zoysias for shaded tees. In the transition belt U-3 Bermuda is most popular for summer use, but alternate tees for winter are being considered necessary by some. In the Northern section, or cool grass region, common blue grass and the fescues are falling into disfavor. Even colonial bent is going into the discard for tees. In the main, *alta fescue*



A good cover of vegetatively planted creeping bent on a tee in the Chicago area.

and Kentucky 31 have not been successful. Merion blue grass is finding favor with some. Others are turning to seaside or selected bent strains such as Cohansey, Old Orchard, Dahlgren, Washington alone or Arlington in combination with Congressional or along with Collins. Arlington alone makes a good tee turf, but is too slow recovering under heavy play. With these bents close cutting is imperative. The turf should be tight — about like a putting green.

Until recently, fairways in the Deep South were common Bermuda. It was developed by sprigging or by seeding with hulled Bermuda grass seed. Now some clubs are turning to selected strains. LaGorce changed to Gene Tift Bermuda on several fairways. Indian Creek has used several strains, Ponte Vedra has planted Tifton 57 rather extensively, and fairways on the new course being built in Jacksonville, Florida, will be Tifton 57 throughout. One acre of nursery to thirty-five acres of fairway is their planting rate.

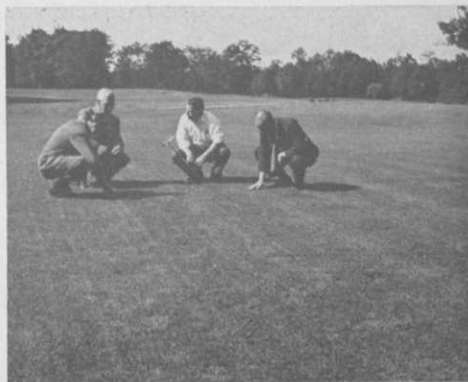
Ponte Vedra used the sprig method of planting on some fairways. On others they

cross-diced the bare or thin areas to loosen the soil. The Tifton 57 stolons were scattered over the surface and cut into the soil with the disc. The planted area was rolled lightly and kept continuously damp until the stolons were well rooted. This quicker method of planting works when supplementary water is available. Deep planting of sprigs is the better method on unwatered areas.

Bermuda for Fairways

Clubs in the transition belt are turning to Bermuda for fairways. Some have used unhulled Bermuda grass seed with indifferent success. Best results have been secured with U-3 Bermuda. Sod from a nursery, either as large size pieces or as 4 to 6 inch plugs have been used mostly. As they developed into patches of turf on the fairway plugs from these areas have been used to introduce U-3 into other parts of the fairway.

Experimental plantings of Zoysia are being tried in several areas. The original trial is located at Fairfax CC near Washington, D. C. on the third fairway. Planting of seedlings on one part and two inch plugs on another was done in the spring of



A fine stand of Merion bluegrass on a tee in Toronto, Canada. It was developed from seed. The rate was 1 lb. of seed per 1,000 sq. ft.

1952. Both were placed on 18-inch centers. By fall of that year there had been some growth. The spread this year has been considerable. It will be another year or more before coverage is obtained. Then several more years must elapse before Zoysia can be evaluated for fairway use. Anyone who has seen the fine turf of Meyer Zoysia at Beltsville, or the outstanding patches on several of the fairways at Miami CC is impressed with the possibilities of this grass. Up to now the method of propagation is costly, and the rate of cover too slow

for the average impatient American.

There are some excellent examples of Merion blue grass turf. When at its best on fairways there is no better playing turf. Rust has been had in some places, probably the result of overwatering. Trial seedings of Merion into existing fairway turf in Detroit and Louisville have been failures. Some Merion is there, but not enough to justify the cost of the seed even at a 40-lb. per acre seeding rate.

Alta and Kentucky 31 fescues seem headed for the discard so far as fairways and tees are concerned. Both have done well in hard to grow places provided close cutting has been avoided. There are examples of excellent performance on steep banks both in the North and in the South. Alta has provided cover in Oklahoma in the shaded areas around tees and greens where Bermuda will not survive.

Interest in Watered Fairways

The long periods of dry weather in 1952 and 1953, which have been country-wide, have stimulated interest in watered fairways. In their zeal for a water system some clubs overlook the importance of an assured source of water. Many who had facilities for watering were unable to do so

because the cities from which water was being obtained were compelled to limit or prevent the use of water on turf areas. Sometimes it was due to a shortage of water, but more often water mains were too small to care for the terrific demand. Most water systems have not kept pace with the ever expanding population.

After providing an assured supply of water, clubs need to revise fertilizer programs and assure themselves that the fairway grass population is of the right type for water and close cutting. Unless this is done, ground cover will become clover, knotweed, crab grass, etc.

Golf Architects to Meet at St. Augustine Fla., Jan. 18-21

Annual meeting of the American Society of Golf Course Architects will be held at St. Augustine, Fla., Jan. 18-21. Ponce de Leon Hotel will be headquarters for the architects.

William F. Gordon, Doylestown, Pa. is the society's president. Other officers are William H. Diddel, Ormond Beach, Fla., vp; and James H. Harrison, Turtle Creek, Pa., treasurer.

1954 TURF CONFERENCES

Jan. 3-9—25th ANNUAL TURF CONFERENCE AND SHOW, Golf Course Superintendents Assn. of America, Municipal Auditorium, Miami, Fla. Agar M. Brown, Secretary.

Jan. 5-7—NORTHEASTERN WEED CONTROL CONFERENCE, Hotel New Yorker, New York. Walter C. Jacob, Secy.

Jan. 18-20—8th ANNUAL TEXAS TURF CONFERENCE, Memorial Student Center, Texas A & M College, College Station, Texas. Marvin H. Ferguson, Program Chairman.

Jan. 18-22—NEW JERSEY ONE WEEK COURSE IN TURF MANAGEMENT, Rutgers University, New Brunswick.

Feb. 8-9—ANNUAL CONFERENCE OF MID-ATLANTIC ASSN. OF GC SUPERINTENDENTS, Lord Baltimore Hotel, Baltimore, Md. E. N. Cory, Director.

Feb. 15-18—PENN STATE TURF CONFERENCE, Pennsylvania State College, State College, Pa., H. B. Musser.

Feb. 22-25—7th ANNUAL CORNELL TURF CONFERENCE, Cornell University, Ithaca, N. Y.

Mar. 1-3—MID-WEST REGIONAL TURF CONFERENCE, Purdue University, Lafayette, Ind. W. H. Daniel.

Mar. 8-10—20th ANNUAL IOWA TURF CONFERENCE, Iowa State College, Ames.

Mar. 10-11—MASSACHUSETTS TURF CONFERENCE, University of Mass., Amherst.

Mar. 11-12—MICHIGAN TURF CONFERENCE, Kellogg Center, Michigan State College, East Lansing, Mich.

Apr. 5-6—SOUTHERN TURF ASSOCIATION ANNUAL MEETING, Jackson (Miss.) CC.

Apr. 21-22—8th ANNUAL SOUTHEASTERN TURF CONFERENCE, Tifton, Ga.

Aug. 5-6—UNIVERSITY OF FLORIDA TURF CONFERENCE AND FIELD DAY, Gainesville.

Aug. 19-20—23rd ANNUAL RHODE ISLAND TURF CONFERENCE AND FIELD DAYS, University of Rhode Island, Kingston.

OTHER MEETINGS

Jan. 18-21—AMERICAN SOCIETY OF GOLF COURSE ARCHITECTS, Ponce de Leon Hotel, St. Augustine, Fla.

Feb. 7-10—CLUB MANAGERS' ASSN. OF AMERICA ANNUAL CONVENTION, Atlanta Ga.