Bermuda Grass (Synodon Dactylon) is a tropical or semitropical grass, native to India. It was introduced into the United States prior to 1800. It propagates from seed or from abundant underground stems and surface runners. The northern growth limits (i.e., where it will survive the winter) correspond roughly with the southern limits of creeping bents. It may be used as a summer grass almost anywhere in the United States, but is not a successful permanent golf course grass north of the southern boundaries of Tennessee and Virginia.

Bermuda produces seed very sparsely, if at all, in the Florida peninsula. There seem to be several strains of the variety prevalent here, varying in texture from fine to very coarse. It is not particular as to soil requirements, as it will be found growing on the poorest sands; however, it responds wonderfully to proper cultural methods, and is to date the only successful golf greens grass in Florida.

In answering GOLFDOM'S December queries, our replies are based solely on our experience with Bermuda grass at the Forest Hills C. C. course in Tampa.

(1) When should Bermuda grass be sown, and when fertilized?

Fertilize your seed bed with any good organic fertilizer, as part of the seed bed preparation.

Bear in mind that only the top six inches of soil needs to be well enriched, as 90 per cent of the root growth will be in this top soil.

Seed may be sown in this locality any time between March 15th and June 1st, it being understood, of course, that water is available during this period. Our rainy season does not start until about June 15th. Under proper conditions, 5 pounds of seed per 1,000 sq. ft. of area is plenty.

Our experience has been that it is simpler and quicker to produce Bermuda turf by the vegetative method than by seeding. In vegetating, we dig up the grass needed, chop it to about 2-inch lengths, broadcast evenly over the properly prepared area, cover with about three-fourths to one inch of soil, roll down and keep moist.

Top-Dressing Practice

(2) What sort of top-dressing, and how often used?

We find it necessary to top-dress at least six times a year. Eight would be better if time and funds permitted.

For top-dressing material, we use a compost of about one-fourth dairy manure; whatever vegetable material, such as grass clippings, etc., we may have available; one-half sand, and the balance a black mucky sand taken from low area about the property. We try to keep this material composted from 8 months to one year ahead. At each top-dressing we use approximately one cu. yd. of compost to each 5,000 sq. ft. of turf, and supplement this with an addition of some good nitrogenous (6 per cent to 8 per cent) fertilizer applied at the rate of 10 lbs. per 1,000 sq. ft. This additional fertilizer is put on the greens just ahead of the compost, and worked in with it.

(3) Should Bermuda grass greens be watered, etc.?

This locality has abundant rainfall during four months of the year. During the balance of the year artificial watering is absolutely necessary, not so much to keep a surface that will hold the ball, but to keep the grass in continuous growth. Our practice is to water at night. Each green is watered twice each week during the cool dry months, and three times each week during the warmer dry months. Nature overdoes the watering during the rainy season.

(4) Does it harm the greens to play on them all year?

No. Not if you are giving your greens proper care.

Forest Hills C. C. opened to play in November, 1926. Since that time the course
has been open twelve months each year. Our greens are improving each year, in spite of the fact that play is steadily increasing. We do not use temporary greens at any time, not even when putting in our winter rye seeding.

(5) Will a filler of bluegrass or fescue make greens less jumpy?

Yes. But why bother with that when judicious watering, fertilizing and top-dressing will give you a smooth one-grass green?

Here in Florida we have just enough cold weather to brown the Bermuda and make it dormant for a short while. For that reason it is common practice to sow a cool weather grass for winter greens. Italian rye, Kentucky bluegrass, redtop, poa bulbosa (bulboxus bluegrass), or creeping bent may be used alone or in combinations for this purpose. Our practice is to use only Italian rye at the rate of 12 to 15 lbs. per 1,000 sq. ft. This may be sown any time after October 1st. We put it off as long as we dare. This year our rye was put in the first week in December, just about two weeks ahead of the first cold snap. So long as the weather is such that the Bermuda continues to grow, the rye is unnecessary, and only an added burden in greenkeeping.

Bermuda Grass Conditioning
Methods That Work for Me

By T. J. LUNDY
Greenville (Miss.) C. C.

FROM the first of April on you can start planting bermuda grass seed, but this way is slow in getting a good mat quick. I found the best way was to take bermuda stolons and cut them in lengths that ran from one to three inches long, place them thick all over the green, and then top-dress with about one-quarter inch of dirt over them. Then give the green a good watering. In this way you get a better green faster. Of course, you could put seed on top of this and it would help lots.

In regard to watering a bermuda grass green, I have tried both night and day shifts and have not found any difference. The only thing I found in watering at night, the workmen were not bothered with the early play.

The water pressure on my course was so low that I used one boy on each nine, just going from one to the other green all the time, changing the sprinklers. Sometimes these sprinklers ran for weeks without stopping. With good water pressure you would not have to do this, of course. I have found that you must have your green watered to the depth of two inches to hold the moisture and softness of the green.

I have tried all kinds of fertilizer. On some greens one kind was fine, others no good at all. I am inclined to think that milorganite is good for all year use, and it is comparatively inexpensive. I had a special manure made for me by the Marine Fertilizer Co. in Gulfport which is the best you, in my opinion, can buy for bermuda grass, but this is rather high priced.

In regards to top-dressing, rotted cow manure with rotted leaves and humus hauled from the swamps, mixed with oyster shell dust, is the best top-dressing that you can make. Cow manure and rotted humus feed and hold the moisture and make the green soft. That is what you are after.

I find that top-dressing a green whenever you think it needs it is better than having a fixed rule on certain days, as all you are trying to do is get the tender shoots or blades coming all the time to get the best greens. If you do not top-dress often enough the grass will become hard and stubby.

My motto has always been stay as close to mother nature as possible. "And whenever in doubt" top-dress if it is only with plain top soil.


ARTHUR B. PORTER, formerly active in the New England Service bureau, has established a golf course equipment and supply business with headquarters at 55 Dearborn St., Salem, Mass. Porter maintains a warehouse in Salem, 16 miles north of Boston, with trucking service for rush orders.

Whitlach's Golf—MacMillan Co., Chicago and New York.—The third reissue of this practical primer shows that the volume retains its interest and value for the golfer in the earlier stages of his development. References to the cleek and sand tees in this simplified classic show how the game has marched along in the six years since the last revision, but the fundamentals of the swing remain the same as they were observed by Marshall Whitlach when he set down his ideas for making the path to good golf easier.