Ironize Your Course for the Winter

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HEN YOU SEE pictures of winter golf in Arizona or in the Southwest in general, the golf course always has beautifully overseeded ryegrass fairways. Most of the winter golf in these areas however, is not played on ryegrass fairways; it is played on one of the best surfaces of all for golf dormant bermudagrass. To help bermudagrass fairways retain their color longer in the winter, and become green more quickly in the spring, we "ironize" our course. It is one part of a three-part winter maintenance program.

I. Fertilization

A late fall fertilization is important. Fertilizer should be applied three to four weeks before the first anticipated frost. It should be of a slow release nitrogen variety and also be high in potash to promote winter hardiness. The concept here is to have the bermuda growing well and have plenty of nitrogen reserves as the turf goes into the winter.

II. Height of Cut

In order to insure an acceptable playing surface for the entire winter, the fairway height of cut is raised from normal 1/2-inch - 5/8-inch range to a 3/4-inch -7/8-inch range. A good playing surface or mat will develop, which will support golf cart traffic throughout the winter. The timing of this change in the height



(Above) Mix in a herbicide and produce a bermudagrass monoculture.

(Top) With bermudagrass dormant, the ironized fairways also take on greater definition and reduce glare.

of cut is critical in that it must be done early enough to allow the additional growth and mat to develop. It should coincide closely with the late fall fertilization.

III. Ironizing the Course

The use of ferrous sulfate on dormant bermudagrass is not a new concept. I first became aware of it while visiting Art and Jim Snyder at Paradise Valley Country Club some 10 years ago. The ferrous sulfate powder is mixed into solution and applied at a rate of 10 to 12 pounds per acre. The ferrous sulfate solution needs to be in a well-agitated spray tank so that it will not settle to the bottom.

The spray causes the leaf blades to become darker and therefore attract and hold more heat. It also relates to chlorophyll production within the plant during the growing season, and thereby increases carbohydrate production and storage. It encourages the bermuda to remain green longer into the winter and to turn green sooner in the spring. Once the bermuda fairways go dormant, the ferrous sulfate acts to outline them, giving the golfer a better target area, greatly reducing the glare of golden brown winter bermuda.

The cost of iron application is quite nominal with ferrous sulfate selling for between 20 cents and 30 cents a pound. Three or four applications may be necessary throughout the winter, but it is worth it. I have seen treated fairways turn green in the spring three to four weeks ahead of non-treated fairways. The golfers appreciate playing on green grass sooner than their neighbors. Besides, the late fall application of nitrogen pays off again as the nitrogen reserves in the plant and soil become available. If you really want to get fancy, a herbicide such as Kerb can be added to the tank mix for control of many winter weeds and Poa annua. Be careful, however, not to encroach on areas overseeded with ryegrass. It will take out the rye along with the unwanted grasses. Some great lines of definition can be drawn with Kerb around ryegrass collars.

Ferrous sulfate can be a very effective management tool on dormant bermudagrass fairways. This ironizing will delay the bermuda from going dormant in the fall and encourage earlier spring greenup. The purist golfer will agree that bermuda, even though dormant, makes an excellent fairway turf and the ironizing makes it better. This practice will become more important in the future as new, tighter water laws become effective and the excess water used for maintaining overseeded fairways becomes unacceptable, unaffordable and perhaps illegal. We will have to remember that golf is played on grass, not on color.