Buchen a Master Greenkeeper

An American superintendent has been awarded the prestigious Master Greenkeeper Certificate from the British and International Golf Greenkeepers Association (BIGGA).

Terry Buchen, 47, of Double Eagle in Galena, Ohio, collected the award from Lord Griffiths, captain of the R & A, at BIGGA's recent Turf Management Exhibition in Harrogate, Yorkshire.

A contributing editor to *Golf Course News*, Buchen picked it up with two British grenkeepers, David Whitaker and Anthony Davies. Four years after the launch of the Master Greenkeeper Certificate, there are now eight Master Greenkeepers.



Johnny Burns' block modification, which attaches directly to the Verti-drain, adds major impact to aeration process.

Burns' invention greatly increases deep aeration

By PATRICK M. O'BRIEN

One of the first superintendents in the United States to buy a Vertidrain, Johnny Burns continues to add inventions to improve the machine's production.

The superintendent at Charlotte (N.C.) Country Club in Charlotte,

Patrick M. O'Brien is director of the United States Golf Association Green Section, Southeastern Region.



Burns last spring developed a new block modification that allows closer tine spacing and increases to about 66 percent the amount of root-zone material extracted. The new attachment may improve the efficiency of the Verti-drain aerator, so that fewer treatments are needed for even the poorest of soil conditions.

Verti-drain deep-tine aerification is a labor-intensive, disruptive maintenance operation for putting greens.

In 1987, the Verti-drain was introduced into the United States from Holland.

The new block is steel-reinforced and attaches to the existing tine holders of the Verti-drain. Four bolts are used to secure them to the machine. This block allows the superintendent to produce an alternative tine pattern with a threeby three-inch rectangular spacing, compared to the existing irregular pattern of three- by 4-1/2-inch with the original tines. This allows for a significant increase in the amount of root-zone material that can be extracted during the aerification process.

With the use of a 1-1/8-inch hollow tine, and a normal penetration depth of 10 inches with the Verti-drain, approximately 3.4 cubic yards of soil per 1,000 square feet can be extracted with the new attachment.

The original block pattern using the same tines and depth penetration will extract 2.3 cubic yards of soil per 1,000 square feet. On a 5,000-square-foot green, it is possible to extract up to 10 percent of the root-zone material using this procedure, compared to six percent without the attachment.

However, it does take significantly more time and labor to complete this project, with the large volume of root zone extracted and the top dressing required afterward to fill the holes. At Charlotte Country Club, using the original tines normally took the aerification crew 18 hours to complete the project, but using the new blocks doubled the project time to 36 hours. With the increased number of holes made during the project, it took the bentgrass approximately three weeks to fully recover during pleasant spring weather.

The new block attachment has helped Charlotte Country Club become more efficient with its Verti-drain program. The membership has agreed to try this new program for the next four to five years in the hope it will delay the necessity for a green reconstruction project. For older golf courses with less-than-ideal soil conditions, superintendents may consider using this idea to reduce the number of Verti-drain treatments and to make more of an impact on changing the soil profile.

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