



Biltmore Forest Country Club superintendent Don Burns notes the problem he had with the cart path on the number 8 hole (left). At right is the much-improved path after using Enkamat.

Geomatrix products demonstrate versatility

Biltmore Forest Country Club in Asheville, N.C., has shown a drastic improvement in quality since experimenting with some technologically advanced materials several years ago.

"Golf is a difficult game to master, and our members don't want to be further frustrated by having to deal with worn-out fairways and soggy areas that result from poor drainage," says Biltmore superintendent Don Burns.

Burns characterizes himself as a "traditionalist." But when one member of the club suggested he try more modern solutions to improve the course, Burns listened. That member was Palmer L. Skoglund Jr., director of BASF Corporation's Geomatrix Systems.

The products Skoglund recommended included Enkamat, a soil-reinforcement matting; Enkadrain, which is used to keep moisture away from subsurface walls; and Enkadrain H, a drain matting that can be applied to soggy areas to drain off excess water.

"I was skeptical about these products at first," Burns admits. "But now you can count me as a believer."

One of the first problems club management faced was a wet, damp pro shop basement. When a new patio was added, the foundation was dug up and Enkadrain was installed. That solved the problem and allowed a previously unusable part of the shop to become a

shoe shine and golf club storage area.

Enkadrain is a matting designed to relieve hydrostatic pressure, one of the primary causes of basement water problems. Placed against foundation walls with the filter facing away from the structure, Enkadrain blocks out sediment and channels water flow down to a drainage pipe.

Enkamat, on the other hand, was first used on the fairway of the eighth hole. Since then, no maintenance tasks have been performed on that fairway except aeration.

"From a player standpoint, the results have greatly improved the course," Burns says. "In the summer, that area used to turn to solid dirt, and when it rained the players would slide and tear up the whole area. That doesn't happen now."

He even used the black nylon material—which absorbs heat—on top of the ground as a heat sink to germinate grass on the banks of a pond at the third green. Grass seed can be sprinkled on top of it, and it grows through the mesh. The procedure is especially effective during heavy spring rains when it's difficult to get grass to germinate. Foot traffic that would normally destroy the grass has no impact on the geomatrix material, which protects and supports young grass plants.

Enkamat has also helped Burns deal with erosion problems. It has been installed on steep banks around the practice tee, preventing wash-

And it's also been used on banks along a creek that runs across the course.

"Now we have nice, even banks along the creek and the maintenance people can go right up to the edge of the water with mowers. It's a tremendous labor-saver because we don't have to do the whole area with a small hand mower," Burns claims.

Finally, a serious drainage problem on No. 17 was solved with Enkadrain, which is Enkamat completely encased in a filter fabric. The fairway has a low, flat area near the creek that is partly shaded by 50-foot-tall hardwoods. Even during long, dry periods the area remained soaking wet. And clay-laden soil clogged drains.

"To solve the problem," Burns relates, "we cut a series of 250-foot long, 18-inch deep, 6-inch wide ditches and put down plastic pipe with holes in it on top of a layer of gravel. We covered the pipe with a filter fabric to keep the pipes from getting clogged."

"We put additional gravel on the pipes and then inserted Enkadrain H. It blocks all the soil and clay and prevents them from getting into the drainage system."

To fill the trenches, a thin layer of soil was placed on the Enkadrain H and the original sod was replaced.

Burns and others foresee increasing use of geomatrix products because they're lightweight, easy to handle, and can be put down quickly with a minimal disruption of play. **WT&T**