Topdressing: An Ol’ Drainage Standby — and More

By Anthony Pioppi, Contributing Editor

The process that brought topdressing to fairways was slow. First it was greens, then tees and then approaches. From there it was a migration from the Northwest all the way to the Southeast. Topdressing made its way to the fairways of the rainy Northwest 25 years ago to firm up mucky conditions as well as improve surface drainage. The procedure is now being used nationwide, even in Florida.

“It's been a big help dealing with drainage issues,” says John Foy, USGA's director for the Florida Region Green Section.

According to Foy, the practice has been used for about five or six years, mostly by high-end facilities. Along with firming up areas, superintendents are raising fairways — some of which are below sea level — and using topdressing to combat the thatch and organic matter buildup common to bermudagrass.

The application rate is usually between one-eighth of an inch and one-fourth of an inch and occurs a minimum of two times a year. The average annual cost for sand can exceed $50,000.

The first real catalyst toward topdressing fairways came from superintendents in the Northwest who realized you could turn winter problem areas into playable golf courses. The second catalyst came through technology.

“It took off in the 1980s when manufacturers came up with a better way to spread the sand,” says Larry Gilhuly, director of the USGA's Northwest Green Section. Superintendents who had been using topdressers made for greens could now tackle fairways in much less time.

“When spinners hit, that’s when it took off,” adds Gilhuly, who estimates that more than 50 percent of golf courses in his area are topdressing fairways.

According to Foy, the practice has been used for about five or six years, mostly by high-end facilities. Along with firming up areas, superintendents are raising fairways — some of which are below sea level — and using topdressing to combat the thatch and organic matter buildup common to bermudagrass.

The application rate is usually between one-eighth of an inch and one-fourth of an inch and occurs a minimum of two times a year. The average annual cost for sand can exceed $50,000.

The first real catalyst toward topdressing fairways came from superintendents in the Northwest who realized you could turn winter problem areas into playable golf courses. The second catalyst came through technology.

“It took off in the 1980s when manufacturers came up with a better way to spread the sand,” says Larry Gilhuly, director of the USGA's Northwest Green Section. Superintendents who had been using topdressers made for greens could now tackle fairways in much less time.

“When spinners hit, that’s when it took off,” adds Gilhuly, who estimates that more than 50 percent of golf courses in his area are topdressing fairways.

Scott Kinkead, vice president of Turfco Manufacturing, points to the incorporation of the chevron-belt design into topdressers as another reason for the popularity of fairway topdressing. Superintendents were able to spread heavy and wet sand over large areas like never before with that addition, Kinkead notes.

It was the desire for Northwest golf courses to be open year-round that first kicked the idea of fairway topdressing into gear.

Golf courses turned into muddy quagmires and were basically unplayable in the region during the winter and spring because of the almost daily rainfall on the courses' clay-based soils. Sometimes balls disappeared into the muck, and golf cars went months without being able to leave paths. On other courses, conditions deteriorated so much that mowers could not cut the grass.

At Sahalee Country Club in Sammamish, Wash., superintendent Richard Taylor used topdressing to transform his fairways from mud to manicured turf. Taylor says his soil is glacial till, which is heavy and holds water. There were thatchy fairways with little root zone.

In the early 1990s, Taylor divided the golf course into Priority 1 and Priority 2. He attacked the Priority 1 areas with an aggressive regimen of one-fourth of an inch topdressing every seven to 10 days. Taylor says the members...
Continued from page 92
tolerated that regimen for more than a year, but soon had their fill of it. Taylor then switched to spring and fall applications at about a one-fourth of an inch.

Nearly 6 inches of sand were added to the course after 10 years. Taylor is able to maintain those areas by merely aerifying and dragging the cores back into the turf. He continues to apply sand in the few problem areas that still exist. He calls the change “amazing” and likens the soil to an ocean beach at the waterline. “You can play golf on it, even when it is 100 percent saturated,” he says.

Topdressing, though, is not just for wealthy private clubs. Many affordable daily fees and municipals now understand the practice can increase winter revenue — or at least make winter maintenance easier and result in better springtime turf.

At Tokatee Golf Club in Blue River, Ore., superintendent Bill Masten says the combination of wet winter months and clay soil would result in frustrating conditions for players. It is the norm for Blue River to get up to 90 inches of rain in a year.

“They’d hit a ball and then it would disappear,” he says. “Spring was really bad for us.”

Masten said the first spots the privately owned club topdressed were the heavy traffic areas near tees. He contracts his topdressers out three times a year. After nearly a decade of the practice, the cores remaining after aerification are made of sand. A core harvester breaks the cores up enough so the majority of the sand falls off while the thatch and grass are collected.

“We still have standing water, but the fairways are firm,” Masten says.

Although the course is closed November through February, maintenance during that time is much easier, Masten says, and playing conditions are vastly improved come spring, resulting in more rounds played early in the year.

In Florida, topdressing began in the late 1990s and is almost exclusively used on high-end facilities. While it may seem surprising that courses in a state that is mostly sand would topdress, the USGA’s Foy says the practice is more about raising the level of fairways and getting rid of thatch than for surface drainage. Foy says topdressing also helps rid courses of the mucky organic layer produced by bermudagrass.

Florida courses topdress in the summer when play is down at about the same rates as the Northwest, but with more frequency thanks to the fast-growing bermudagrass.

Southeastern superintendents, however, have to be careful when applying sand during the heat. “You put this down when it’s in the 90s, and you’ll torch your golf course,” Foy says.