BY KATIE MORRIS

Making amends

Illinois superintendent uses natural resources as soil amendments.

Golfers prefer playing on surfaces that are green, smooth and consistent. Soil amendments helps give turf the strength and absorbance it needs to withstand daily mowing, watering and foot traffic. To keep the course looking healthy and green, Steve Diel, golf course superintendent at Quail Creek Country Club in Robinson, Ill., uses natural resources around him to amend the course's soil.

Diel has been with Quail Creek for 31 years and previously was the superintendent of Charleston (Ill.) Country Club. He has learned from being in the industry for more than 40 years what type of soil amendments work best on the course. He uses two types of amendments: pure sand and compost that consists of grass clippings and leaves.

Topdressing the greens with sand builds the soil system, allows for better drainage and restrains compaction, Diel says. His crew applies a light application six to seven times a year and a heavy application when they aerify the greens twice a year.

The second type of amendment involves his lawn division gathering grass clippings and leaves during the year and composting them to mix in the soil. Compost is mainly used for building or renovating areas such as tees or bunker surrounds, Diel says. He thought of the idea to use compost after realizing he and his staff needed to do something with the material generated from maintaining the course. He thought this would be a good way to make use of the materials.

"Adding this organic matter helps drainage, and because compost isn't as tight as clay, it helps keep soil looser," he says.

Diel's composting of grass clippings and leaves comes at a minimal cost for a course that has a $275,000 annual maintenance budget, of which about $5,000 is spent on soil amendments. The composting happens onsite, so the only expense comes from rolling the pile over during the process to keep the microbes active, he says.

Diel purchases the topdressing sand from a sand and gravel supplier located 35 miles away from the club. He purchases a blend the supplier makes specifically for golf course construction. The supplier typically hauls a couple loads to Quail Creek during spring and fall.

"We probably purchase 50 to 75 tons a year, and spend about $11 to $12 a ton," he says.

Topdressing greens lightly with sand takes

Topdressing greens with sand builds the soil system, allows for better drainage and restrains compaction. Photo: Redexim Charterhouse

two crew members five to six hours. It takes them three hours to lightly dust the greens with sand, then they brush it in. When applying heavy topdressing the process takes all day because they're putting down much more material.

The composting application is only applied to new construction or areas that need to be renovated. The process involves working an area down to a grade they want with yellow clay, applying a 2-inch layer of compost, applying 4 to 6 inches of soil and then seeding the area.

"We've been doing a lot of small projects pretty frequently, but no major overhauls," Diel says.

Another part of Diel's soil amendment process includes conducting soil tests every three years. He's in a routine where he tests a third of his greens, tees and fairways every year so every third year they're all getting checked.

"It's a way for us to monitor trends of various nutrients and adjust our fertility to keep us moving where we want to go," Diel says.

Superintendents looking into soil amendments should ask themselves what kind of problem they have and what a particular product is going to do for them – not just in the short run but in the long run, Diel says.

"They should think about how this process is going to affect things in the long run because once you get in and start changing the soil, that effect is going to stay with you," he says. **GCI**

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At Quail Creek Country Club, compost is mainly used for building or renovating areas such as tees or bunker surrounds. Photo: PICSUNV I istock.com