

Designed for maintenance



On the 17th hole, golfers tee off of a 135-foot bluff overlooking swift Poplar River.

Mike Davis joined the Superior National management team from the outset. He got the opportunity to contribute suggestions that make the course easier to maintain.

By BRIDGET FALBO

Along the rocky north shore of Lake Superior in Minnesota's north woods, lies a 400-plus acre golf course carved out of a forest of second-growth aspen, birch and spruce. The course is split by the Poplar River, a fine trout stream. Nearby Superior National Forest lends its name to the golf course—Superior National at Lutsen.

Course architect, Don Herfort of Minneapolis, designed this course—located 90 miles north of Duluth, Minn.—to preserve the area's wilderness beauty. Superintendent Mike Davies has maintained it since its opening in 1991 with equal devotion.

This is a special location with views of expansive Lake Superior from 13 of the 18 holes. (Newcomers to the course soon learn that all putts break to the lake.) Aspen and birch frame the fairways, isolating each hole. On the course's signature hole, golfers tee off of a 135 foot bluff overlooking the rushing Poplar River.

Davis joined the course management

team at the beginning. He got the opportunity to contribute suggestions that make the course easier to maintain. He can say, literally, that he knows this course from the ground up. Or, maybe that's "from the rock up," since the course sits atop glacial till with lots of exposed rock.

"I wouldn't say this is the greatest site to build a golf course; you need a little bit of soil to build a course," says Davis grinning.

He worked closely with the U.S. Soil and Water Conservation to save what little topsoil the site contained; building silt screens and earth dams to trap the sediment before it washed away into the river; constructing sediment ponds to catch runoff. The ponds are now part of the lagoons on the course.

Shallow soil, slow drain

Because of the shallow three to four inches of topsoil, the course can only absorb so much water. Hilly terrain exacerbates the problem. The course, in fact, backs up to Moose Mountain which drains down across the course. Davies has installed drainage tile across some fairways,

built earth berms to hold water off others, and dug drainage ditches.

He also leaves the turf at a higher cut near the ponds to filter out chemicals as the water drains, and also leaves a no-spray zone around water features to prevent chemical runoff. On the hole featuring the Poplar River flowing through the fairway, Davies' crew planted a rose hedge along the upper banks of the river just off the tee. The roses are heavy feeders soaking up extra water and fertilizer, and look great.

The course was built on private land that was donated to Cook County. It's owned by the county and managed by a board of local resort owners.

"Surrounded by the Poplar River, Lake Superior and the Boundary Waters [the Boundary Waters Canoe Area Wilderness], I have to be very environmentally conscious," explains Davies who takes a curative rather than preventive approach to disease control. In 1995 and 1996, for example, Davies kept the turf healthy without using any summer fungicides. He

cont. on page 20G



admits he couldn't have done this if golfers and management didn't agree to allow some disease to be tolerated.

The best defense: hardy turf

For his part, Davies is pretty aggressive with top dressing, verticutting and aerating. "The harder your turf, the less prone it will be to disease," says Davies. He recently overseeded the fairways with new and improved varieties that are hardier than previously grown. He used Abbey Victa and Coventry varieties from Scotts.

Fertilizing with organic fertilizers, such as Milorganite, helps maintain the health of the turf, without creating nutrient buildup in the surrounding ecosystem. Davies applies fertilizer so it will be absorbed before a heavy rain and when the plants will use it most efficiently. He uses biostimulants, like liquefied seaweed extract, to increase the microbial activity which, he believes, also helps prevent disease. He's also experimented with shots of micronutrient products mixed with a wetting agent.

If the wilderness setting isn't challenge enough, Davies knows how wet and cold northern Minnesota can get. Davies' crew spends many spring days snowblowing greens. They hand shovel

The Poplar River crosses the fairways on the 2nd and 4th holes.

Superintendent Mike Davies deals with natural nuisances in all sizes, from large moose and bears to the minute dollar spot, on his course in northern Minnesota.

when they get close to turfgrass, sometimes after the course is open the second weekend in May, when sportsmen fill local resorts for the start of sport fishing.

Generally Lake Superior keeps the weather wetter and cooler than more inland areas. A fog may roll in off the lake and stay for three days. Occasionally the course is plagued by pink snow mold in the fall because of the increased wetness. Increasing the drainage and cutting the grass

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to keep the dew off helps dry the grass faster to keep this disease in check, but Davies occasionally resorts to spot spraying with Daconil 2787.

The worst weather-related damage Davies has yet encountered revealed itself this past spring as a result of a late-fall ice storm that killed the turfgrass on many of his greens.

"Three inches of ice sat on some of the greens through the winter. If it had been

three degrees cooler we would have gotten two feet of snow instead of the freezing rain and the greens would have been fine," Davies says. Nine greens needed restoration; several requiring complete renovations.

"When confronted with a situation like this from Mother Nature you learn to prioritize," Davies says. The damaged greens were aerated early, verticut heavily and overseeded two and three times. Davies purchased some 6-mil poly green covers to boost soil temperatures and encourage faster growth. The last green finally came in on the fourth of July weekend.

Go lightly for turf care

Davies believes in using the lightest equipment possible and walk-mowing the greens to avoid stress on the grass. His Airway unit proved invaluable this year due to the heavy use in renovating the greens. This unit doesn't core the area, but rather penetrates the green with a shatter tine and gets the air and water exchange to the roots without disrupting the surface.

Having a great mechanic is essential to successfully maintaining a course, says Davies. He adds that his maintenance man keeps the equipment in top form and always sharpened, so grass is cut cleanly rather than broken. Employees walk mow all the greens, rather than using the triplex mower—at least until early fall, when he loses five or six of his staff of eleven as they return to college and high school. □

