No-Till Farmer Benefits Water Quality at Little Brown Church

There is a tradition at the Little Brown Church in the Vail near Nashua that newly married couples, at the close of the service, walk down the aisle and pull the rope to ring the church bell. Carried out by many of the 72,000 couples married at the church, the practice is designed to remind couples that they need to “pull together,” because life always has its ups and downs.

Robert Wolff of Nashua can hear the bell ringing from his nearby farm. His land is on a hill that overlooks the historic 150-year-old church immortalized by the hymn “The Church in the Wildwood.”

Scott Switzer, district conservationist with USDA’s Natural Resources Conservation Service (NRCS) New Hampton field office, thinks Wolff has started his own tradition—one of great conservation in Chickasaw County. Switzer says Wolff’s stewardship directly benefits the Little Brown Church and everyone else down the hill from his land.

State Soil Technician John Christoph has worked closely with Wolff for many years. Christoph easily rattles off many of the conservation practices Wolff has installed: field borders, grassed waterways, terraces, buffer strips, windbreaks, contour farming and—the big one—no-till.

Wolff has been farming since 1961 and owns 178 acres. He now grows only corn and soybeans, and has been practicing no-till since 1983.

“You don’t want to lose your soil,” says Wolff. “That’s the main reason I no-till—because it doesn’t lose the soil.” Wolff notes there are other benefits, too. “When I no-till, it hardly uses any fuel because you are not working the tractor that hard. It saves trips in the field and, the less traffic in the field, the less compaction you have. And, I don’t have a lot of rock to pick up.”

No-till offers Wolff substantial soil savings on his highly erodible ground. Christoph estimates conventionally tilling Wolff’s farm would result in an average of 6.3 tons per acre of soil lost each year. With no-till, that number drops dramatically to 0.43 tons per acre per year.
“The lower the soil loss,” Christoph says, “the less pollution there is entering Iowa’s lakes, rivers and streams. That includes the stream in back of the Little Brown Church.”

Corn and soybean prices, yields and weather are key considerations in the profitability of any farming operation. Wolff is also happy with both his lower no-till input costs and good crop yields. By tracking his yield, he knows parts of his fields produced more than 200 bushels of corn to the acre. His farm average was 161 bushels per acre.

Switzer is very pleased, too. He said, “Bob Wolff’s tradition of conservation is one we want to help other farmers obtain, because clean water benefits everyone--including the Little Brown Church.”

Energy Estimator
NRCS’s Energy Estimator for Tillage shows that, by using no-till on his farm, Robert Wolff is cutting his fuel costs nearly in half compared to using conventional tillage methods. The Energy Estimator is one of several tools NRCS developed to increase energy awareness in agriculture. It can be found online at: http://ecat.sc.egov.usda.gov/.

State Soil Technician John Christoph and no-till farmer Robert Wolff stand in front of the historic Little Brown Church in the Vail near Nashua. NRCS officials credit Wolff’s conservation practices with helping keep soil in place and greatly reducing sediment pollution from entering near the historic 150-year-old church.