

FEWER STONES AND LESS EQUIPMENT MAINTENANCE WITH SWITCH TO STRIP TILL

BY: LILIAN SCHAER

At Cedar Lodge Farms, plow tip and cultivator part longevity used to be measured in hours rather than seasons. But that has changed dramatically ever since Warren and Christine Schneckenburger switched to strip tillage several years ago on their Eastern Ontario farm on the St. Lawrence River near Morrisburg.

Benefits of Strip Tillage

Strip tillage is a tool bar with row units that tills strips of soil eight to 14 inches wide using shanks, coulters or a combination of both. The tilled strip is able to warm up and dry out more quickly than the rest of the soil, and fertilizer can be banded or mixed in. The undisturbed strip helps reduce erosion and can leave the cover crop undisturbed, fostering soil health.



Strip Tillage Technology

There's been innovation on the family farm for generations, starting when Warren's grandparents moved east from their first farm at the corner of Yonge Street and Steeles Avenue in the Greater Toronto Area. His father was an early adopter of conservation tillage, purchasing his first no-till drill in the late 1980s, and Warren began considering strip till technology after attending a national no-till convention in 2011.

"It opened my mind to what could work for us and we spent six years going to conferences and speaking to producers and learning as much as we could before jumping in," says Warren. "We settled on a coulter machine; with our shallow, rocky soil, a shank wasn't going to work."

Although they will always use some of their conventional tilling equipment in situations when the weather doesn't co-operate or if they're undertaking land improvement projects, he's become a strong proponent of strip tillage since making the switch. It's now the main focus for their corn crop and believes that widespread adoption of the technology would be a net positive for Ontario and help reduce soil loss.

"The strip tiller is a night and day difference and by leaving that undisturbed row middle, water infiltration has improved, and nutrients stay in the soil better," he says.

Economics Play a Key Role

According to Christine, farmers considering strip till should know their soil and sub soil, and whether they want deep tillage or keep it to six to 10 inches in depth. Economics will play a keep role in decision-making as well, but the investment has paid off on their farm, she notes.

"Our equipment was aging so we were going to have to spend money anyway, and with strip till, we've seen improvements in fuel, labour, time and being able to get work done in a timely fashion," she says. "Our biggest win, though, is having less stones to pick. When you start adding up costs, it was a full time job in the spring along with the mechanical investment and now we don't bring the stones up at all."

They've also seen soil health benefits - more worms, easier movement across the fields and better water infiltration which means greater resilience during extreme weather.

"I was quite skeptical at first in how quickly soil would change, and it's hard to put a number on soil health, but our soils are definitely healthier," added Warren. The Schneckenburgers is one of four Ontario farmers featured in an in-depth video series exploring strip tillage in Ontario. The videos are available at https://www.farmfoodcareon.org/farming-and-the-environment/strip-tillage/.

The project was funded by the Ontario Ministry of Agriculture, Food and Rural Affairs and led by Farm & Food Care Ontario with the generous cooperation of Ontario farmers.

