

STRIP-TILL LOWERS PRODUCTION COSTS WHILE BOOSTING SOIL HEALTH

BY: LILIAN SCHAER

At De Borger Farms, soil health is a priority. So is managing cost of production and the time and labour it takes to run the second generation family cash crop farm in Lambton County.

Implementing strip tillage into their operation has helped them meet goals in both of those areas, reducing the amount of equipment they need and the maintenance that equipment requires, as well as making improvements to their soil properties.

"My son and I farm together; we're the second and third generation on the farm my dad started 70 years ago when he moved here from Belgium," says Gary De Borger. "With strip tillage, we wanted to see if we could reduce our passes, the manpower we need and our environmental impact."

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.

TRANSITIONING

The De Borgers grow corn, soybeans and wheat, and have been using a strip till system for close to 10 years. Their spring field work is now limited to planting and spraying, with tillage work shifted to the fall months after harvest, and it has dramatically streamlined their workloads.

Making the transition required some trial and error to find the right unit to suit their needs, and they're now happy with the performance of their second strip till machine. A detailed evaluation of the costs of strip till, from buying strip till equipment and the possible effect the practice might have on the farm's yields to savings on equipment, labour and fuel, was also a key part of their decision-making process.



"We had to do a cost comparison to determine whether it was the right move to make, but we've gotten it to work quite efficiently in our operation now and I can't imagine going back to another tillage practice," he says, adding he hopes strip till will become more widely adopted across the province.

Since the switch, the farm has spent less on buying and maintaining equipment and simplified their spring operations. As well, their fields are much firmer at harvest time, noted De Borger; previously, when they were still plowing, the fields had more ruts and equipment tended to sink into the soil more.



Value of Equipment Research

For farmers considering strip till as an option on their operations, it's worth taking the time to gain some experience with how the equipment performs, De Borger recommends. One of their early learnings was the value of finding a machine that will contain the soil that is brought up when creating the berm.

When asked about refreshing strips in the spring, De Borger says they have found that a second strip tillage pass in the spring wasn't necessary as it didn't have any impact on performance or yield.

"You can hide erosion issues with conventional tillage systems, and although erosion isn't a huge issue in this area because we are fairly flat, we definitely see a lot less soil movement since making the switch to strip-till," he says.

Gary De Borger is one of four Ontario farmers featured in an in-depth video series exploring strip tillage in Ontario. The videos are available at <u>https://www.farmfoodcareon.org/farming-and-the-environment/strip-tillage/</u>.

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.

