



**Sustainable Canadian
Agricultural Partnership**

Competitive. Innovative. Resilient.

Harris Farms

*Helping keep farms
in the green*



Canada

Farm finding success with cost-saving, greener tillage technique

As far as Kyle Harris is concerned, strip tillage is a winning technique for both his farm and the environment.

Like the name implies, this practice involves preparing the soil in narrow strips where the crops will be planted. While conventional plowing unearths all of the soil in its path, strip tillage is much more targeted. The rows between the strips remain untouched so that the previous year's crop residue and roots provide a path for water to absorb into the soil reducing the risk of erosion. Leaving the residue on top of the soil acts as a mulch, which helps with weed control, compaction and acclimatizes the temperature of the soil until the planted crop is big enough to shade the soil.

"Strip tillage is the best of both worlds, we get added soil health benefits that go with a no till program, but still get vigorous growth with a prepared seedbed like a conventional system," Kyle explains.

The machine that they have on their farm not only prepares the seedbed in one pass but it also places fertilizer in the root zone so it is easier for the plant to utilize and absorb the nutrients. "Since the nutrients are being placed inches away from the seed, it allows us to use less fertilizer at planting and spoon feed the crop when it is in its most crucial growth periods," he adds.

In addition to being beneficial to the environment, it also means savings in both fuel and time on their farm in Belle River, where he grows corn, soybeans and wheat with his father, Rob, and brother in law, Chris Devries. Harris Farms was established in Belle River in 2020, after the family moved to the Island and began strip tillage the next cropping year. Kyle explained they had considerable success using the technique on their previous farm in Ontario and wanted to duplicate that in their new operation.

With funding assistance from the federal and provincial governments under the Sustainable



Kyle Harris

Canadian Agricultural Partnership, the farm purchased specialized machinery, allowing them to be one of the first farms in their area to take advantage of strip tillage. Kyle added he was very grateful for the support of the program.

"We tried a few acres at first and then we went harder the next year," he said. "Now we are strip tilling about 95 per cent of our corn."

The machinery allows them to set the depth of the strip (typically 6 inches), incorporate fertilizer and form a raised seedbed in a single pass. The farm then plants the crop with, as he jokes, "a 20 year old planter so that is not quite as high tech."

Since strip tilling leaves much of the soil surface undisturbed, Kyle noted there is less chance of run-off and better moisture retention.

Fewer trips over the field mean the farm is cutting its input costs significantly. As Kyle explained, "you are saving on fuel, you are saving on time and there is less wear and tear on your machinery."

As finding farm labour can sometimes be challenging, he said the time savings afforded by the technique means the farm needs fewer workers during the busy planting season.

"The strip till machine forces the planter operator to plant nice straight rows," added Chris, his brother-in-law. "It retains the water for the plant and it doesn't run off to the waterways. We have been able to significantly reduce our soil erosion."