





## Mark Richards: Innovative Farmer of the Year

written by Catherine Van Arkel

Every year, the Innovative Farmers Association of Ontario (IFAO) chooses a farmer who exemplifies great soil stewardship, progressive thinking, and the drive to explore ways to improve their farming practices. Mark Richards fills the bill and has been awarded the Innovator of the Year Award for 2018. He has worked hard to critically assess and improve his own farming practices over the course of twenty years starting with cover crops, then progressing into no till and strip till, notably in sugar beets and tomatoes a practice not typically used in these crops.

Richards lives on the family farm near Dresden where he farms with his father, his uncle and his cousin. Together they share equipment and resources in order to manage over 2000 acres growing processing tomatoes, sugar beets, corn, soy beans, and wheat.

The Richards have been using no till in soy beans and wheat for over twenty years, while planting cover crops in conjunction with their vegetable production. Having no-tilled successfully in non-specialty crop rotations, tomatoes and sugar beets, the Richards were motivated to experiment further. In 2010, they began to experiment with strip tillage in corn and sugar beets.

In 2013 the Richards purchased an Orthman 1tRipR. Later a Montag cart was purchased to apply fertilizer with the strip tiller. They now are committed to a strip tillage system in corn and sugar beets. Their approach to strip tilling includes a "never till" section between the strip till rows to improve soil structure by alleviating traffic compaction issues, and to use more cover crops in the rotation.

As for tomato strip tilling, the Richards' used their experience from other crops, keeping in mind the need for clean, well-tilled strips to plant into. To achieve this, some alterations were made to the strip till units including replacing rolling baskets with a culti-packer to form the strip and eliminate soil lumps, and adding a system to apply pre-plant incorporated herbicides. Banded nutrient application was adopted in 2017 after fabricating changes to a strip tiller. The machine was built using a BluJet Tracker hitch, Yetter fertilizer openers, a 6-row Orthman 1tRipR and a Valmar 3255 air system.

The cost of tillage was also a motivator to alter their practices as Richards finds the cost of a two-pass strip tillage substantially more cost effective than conventional tillage practices. "We achieve higher efficiency in the spring applying all the fertilizer with the strip till rig, mainly due to the size of the fertilizer tank and the speed at which we can fill it."

"Probably the biggest challenge," Richards admits, "was trusting that the systems would work as we had planned." But the results are positive, as Richards feels they have better water infiltration in the strip tilled fields, and they are starting to see more stable and structured soils, their crop yields are at or above county averages, and diesel fuel consumption and hours on machinery have both been reduced by about one-third. He continues to look for ways to further decrease tractor hours and fuel consumption and maintenance.