

Soil Health Producer Highlights Series

My Farm, My Soil, My Story

Manfred Gross—Fort Vermillion, AB

- * What does “Soil Health” mean to you and why is it important?

Soil health is about taking care of the soil in a way that sustains future generations. Farming is not a ‘one-method fits all’ industry, it requires understanding your soils and developing management strategies that uniquely fit your situation.

- * What management practices have you used to improve soil health on your operation?

We’ve added forage rotations to our marginal lands, and we leave as much residue as possible. We experiment with subsoiling to improve soil aeration and water infiltration where necessary. Most importantly, we regularly conduct soil tests and maintain long term soil records to understand how nutrients are cycling through our soils.

- * What changes have you seen?

Some changes have improved yields. We’ve noticed better water infiltration, less run-off, and less drought stress with subsoiling. We’ve noticed that some forage plants will grow in areas where our cash crops wouldn’t.

- * What are the biggest challenges for soil health in your area?

The climate; we have short, intense summers, and a long winter so changes in the soil occur at a slower rate. Our designation as a semi-arid area is a challenge, and soils here are highly variable. Trying to find equipment that works well across variable soils is difficult. Also there isn’t a lot of research available for large-scale agricultural production this far North.

- * How do you advocate for soil health?

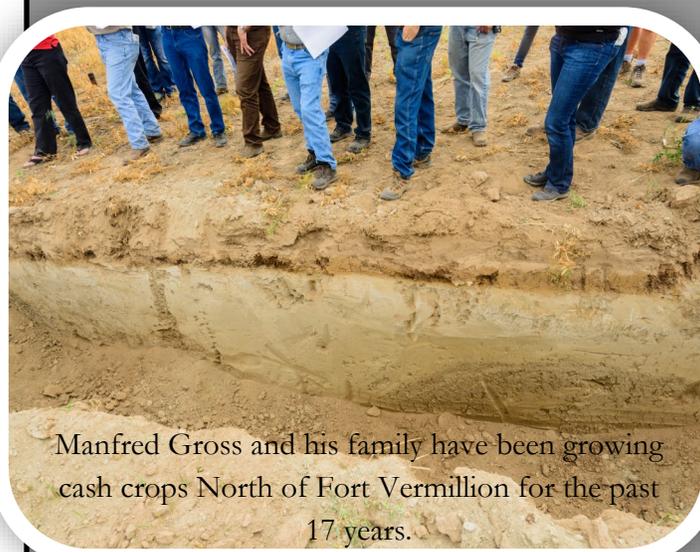
By engaging other producers in conversations about managing soil health. I’m a strong advocate for regular soil testing. I volunteered to have a soil pit dug on one of my fields which was used as an educational tool during MARA’s field tour and I’m often requesting MARA to do more research and extension work on soil health.

- * Do you have any future plans for improving the Soil Health on your operation?

We are looking at the suitability of various cover crops in our short growing season. We hope to incorporate livestock in our rotation system. I am constantly seeking new ideas from other parts of the world, especially other Northern climates.

- * How has improving your Soil Health improved other aspects of your operation?

It makes the operation sustainable to be passed on to a future generation and helps increase our bottom line. Overall, it lets us do more with less.



Manfred Gross and his family have been growing cash crops North of Fort Vermillion for the past 17 years.

The Mackenzie Applied Research Association [MARA] is a not for profit producer driven applied research association. MARA serves producers in the Mackenzie County, the largest County in Alberta and the northernmost commercial agriculture region in Canada. MARA conducts agriculture and environmental research from its Fort Vermillion, Alberta location. MARA is proud to serve the largest number of organic producers in Alberta.

