

Soil Health Producer Highlights Series

My Farm, My Soil, My Story

Matthew Stanford—Magrath, AB

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

Soil health to me means fostering an environment where a diverse range of flora and fauna can thrive within the soil. At the very least we need to maintain, but ideally be improving soil quality through a number of measurable factors such as organic matter and pH. This is important to ensure the soil is there for future generations and helps grow healthy crops today.

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

When dad switched to direct seeding in the late 1990's that was probably the biggest single factor that has improved our soil. Since then we have incorporated perennial forages into the crop rotation, started using variable rate irrigation, and have begun to bring cattle onto the land where possible for fall grazing to cycle nutrients and increase soil biodiversity.

- * What changes have you seen?

Reducing tillage has increased organic matter, increased earth worm populations, and improved soil tilth and water holding capacity. Perennial forages such as alfalfa have helped break through undesirable subsoil features like hardpan.

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

Soil salinity is always an issue in our area. Wet years bring salinity to the surface, and it takes years to leach it back down. Alfalfa helps bring down high water tables and keeps surface salinity under control. Every year is different, and what worked one year does not work the next. Trying to hit a moving target is a challenge.

- * How do you advocate for soil health?

Farming Smarter helps improve my operation by learning from others. Supporting organizations that promote best management practices is key to getting information into the hands of producers.

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

We will continue to adopt new irrigation technology to keep salinity problems to a minimum. Using a fertility plan that is at the very least maintaining, and hopefully building soil will continue to be used. Our endeavors to expand and adjust our crop rotation will also benefit our soils.



We operate an Irrigated and Dryland grain, oilseed and forage operation around Magrath, Alberta on the edge of the dark brown and thin black soil zones. We are close to the Rocky Mountains which gives us warm days and cool nights. This offers benefits and challenges throughout the growing season.

