Meet Your Mentors

Tom Vander Heiden
President & Crop Advisor

David Meidl
Livestock & Crop Advisor

Travis Mathison
Livestock & Certified Crop Advisor

Harrison Hobart
Crop & Livestock Advisor

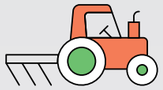
Tim Williams
Crop & Livestock Advisor

GET EXPERT HELP FROM OUR CROP ADVISORS

www.stbiologicals.com/your-mentors

6 SOIL HEALTH PRINCIPLES

Discover the six regenerative agricultural principles that contribute to improved soil health.



Minimize Soil Disturbance

Reduce tillage, overgrazing, and increase nutrient placement and timing.

Keep Roots in the Ground

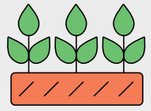
Keeping roots in place and growing a cover crop provide a steady source of food for organisms.

Integrate Organic Nutrients

Including organic nutrients closes the nutrient loop and reduces the need for fertilizers.

Increase Plant Diversity

Diversify rotations and cover crops to diversify soil and build resilience.



Keep Soil Covered

Soil cover reduces erosion and evaporation and helps lower soil temperatures.

Ongoing Biology

By following these principles, you'll lay the groundwork for ever-improving topsoil and better overall results, year after year.

> **We experienced results in the first year of working with STB. For the first time ever, we were able to sell extra forage, rather than having to buy in extra hay.**

ST Biologicals walked with us along every step of the process, guaranteeing success. Without their advice and expertise, especially given the current volatile state of the farm economy, we probably wouldn't have the chance to still be farming today. I would highly recommend STB. They truly have your farm's best interest at heart.

Matt Willenbring
Producer, Cold Spring, MN

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SOIL SPEAKS WE LISTEN

Benefits of Regenerative Agriculture

S.T.BIOLOGICALS™

Have you wanted to try Regenerative Agriculture? But...

- You're overwhelmed and don't know where to start?
- You're afraid it won't work for you so you're waiting for a neighbor to try it first?
- You're not sure if it makes good economic sense for you right now?

We get it. Change can be risky and, not to mention, nerve-wracking. Especially when your margins are tight, you fear one misstep could spiral into a larger problem.

But the truth is, putting off building your soil health could cost you more in the long run. Because carbon-rich, healthy soil is like money in the bank, by waiting to invest in your soil's health, you could be missing out on a snowball effect of healthy gains that will improve your farm—and your life. We're talking more profits, yields, and increased resilience to weather, pests, and disease pressure. You might even get to take a day off.

Jack Stahl, a producer profiled in Gabe Brown's book, Dirt to Soil, put it this way, "Carbon in the soil is worth way more than money in the bank."

The sooner you start investing in your soil's health, the sooner you'll see more productivity in your land. And you can take that to the bank.

Earthworms are a sign of microbial health. Soil should be healthy and loose with good air, water, and nutrient exchange after five years of working with ST Biologicals.

#1 Increase profits & yields.

We're now learning how sophisticated nature is at growing food, without needing a lot of chemical and physical help. That's why producers see their profits go up and their input costs drop once their farm works as an ecosystem. With healthy soil: You'll use significantly less fertilizer and chemicals. Weeds, pests, and diseases are naturally suppressed. You'll experience increased resilience to drought, erosion, and extreme weather.

#2 Strengthen your family legacy with increased soil health.

You may be holding your family's legacy in your hands. When you build soil health, you increase the productivity, profitability, and resiliency of your land and soil. Think of soil health as the best crop insurance money can't buy. It gives you an opportunity to take control of your future. And unlike expensive equipment, it only appreciates in value. Regenerative Agriculture works with nature so it will benefit your farm wherever it is located even in dry, cold, and harsh climates.

#3 Healthy-biodiverse soil adds nutrients back into the soil & into our food.

Growers who've committed to rebuilding their soil have made remarkable gains in vegetable, fruit, and grain quality. Consumer demand is continually changing, and as producers, we need to continue to meet the desires of our end consumers. Many of our crop-purchasing companies, like General Mills and Cargill, see Regenerative Agriculture as the future and have already invested millions of acres—and dollars—in it.

#4 Improve your soil carbon carbon cycling is key to soil & plant health.

Integrating the five soil health principles will improve your soil carbon and the health of your plants. The more your soil improves, the more carbon it stores, the more water it stores, and the healthier plants become as their capacity to photosynthesize increases. This in turn improves soil health and structure, stimulating a very active, desirable, and crucial carbon cycle. Soil ecologist Dr. Christine Jones writes in Acres USA ("5 Principles of Soil Health," 17 Oct. 2017), "The health of the soil and the vitality of plants, animals, and people depends on the effective functioning of this cycle."

#5 Livestock

If you incorporate livestock in your Regenerative Agriculture operation we can help with management decisions. We provide a balanced ration and mineral program for optimal animal health and profitability of your operation.

The sooner you start, the sooner you'll reap the rewards of improved soil.

Though it can take up to 5 years (or less) for full benefits, your land can become more productive, and many producers start seeing results within the first year.

Dig up a shovelful of soil. What do you find?

Challenged soil will be hard, compacted, and have reduced drainage. It will have little to no smell. You won't see much microbial life.

Healthy soil will be aromatic, loose, well-aggregated, crawling with microbial life, and richly dark in color; imagine black cottage cheese or chocolate cake. It will feel spongy underfoot.

We take the guesswork out of Regenerative Agriculture.

There is no one-size-fits-all solution to transitioning your farm to Regenerative Agriculture. Every farm has different resources, challenges, and goals. Without an expert to guide you, you'll likely spend a lot of time and money on trial and error while the results you deserve evade you. At ST Biologicals, we're on a mission to help producers successfully make the transition to regenerative practices, without breaking the bank. We meet you where you're at and partner with you to find the best, most practical road forward to healthier soils.

Here's what you can expect when you work with us:

1. We begin with a discussion of what you'd like to accomplish with your farm. We take a comprehensive look at the farm including soil and feed tests, if you have Livestock.
2. We provide a step-by-step plan of exactly what to do to achieve the results you want.
3. Products (ours or others we recommend) designed to optimize your transition to Regenerative Agriculture.
4. Resources, mentoring, and one-on-one guidance to keep you on track.

Tom Vander Heiden discusses soil health in a field of freshly seeded oats with Matthew Willenbring. In 5 years' time working with ST Biologicals, Willenbring has gone from having to buy feed to selling his surplus.