## Giving Back to the Earth: A Farming Family's Loving Journey in Regenerative Farming

Giving Back to the Earth

by Edwin Shank February 8, 2020 Source



This year was special. It was a dream come true! What was so special about it?

## We grew a crop from the earth... to give back to the earth.

Yes, you heard right. We bought seed, planted it, and carefully nurtured a multi-species crop for no other purpose than to return it to the earth. This 'giving back' crop feeds the plethora of microbes that builds strong healthy soils, and at the same time it is building organic matter and sequestering carbon.

And it works on a large scale. We're renting close to 400 acres of new land that was chemical farmed and are transitioning it to certified organic land. This 'giving back' plan vastly improves the process.

So, rejoice with us!

It's your dedicated support that gives us the financial strength to give back like this! This was not a small investment and we absolutely could not have done it without you.

By the time we bought the 8 different kinds of seeds, prepared the seedbed, planted the land and finally tilled the resulting tons of organic biomass back into the soil… our costs were at least \$175 per acre. Thank you for helping us heal the land this way!

Here are a few pictures. See why we are excited!



We ordered and planted eight species of summer-loving plants. Plus a few other species came along with the mix. (We purchased the cover crop seed mix from <u>Green Cover Seeds</u>. Keith Berns and his wife actually visited our farm and provided the expertise for this project. Check them out. They are amazing.)

Five of the species were legumes that pull nitrogen from the atmosphere and put it back into the soil. In that way, we can grow our own fertilizer as well as our own compost.



The tall plants are Sudan Grass, Sorghum, Sunflowers and Sun  $\operatorname{\mathsf{Hemp}}\nolimits.$ 



Lower in the vegetation forest were Black Cow Peas, Rape Seed, Berseem Clover, Mung Beans, Soybeans, Buckwheat and Perl Millet.



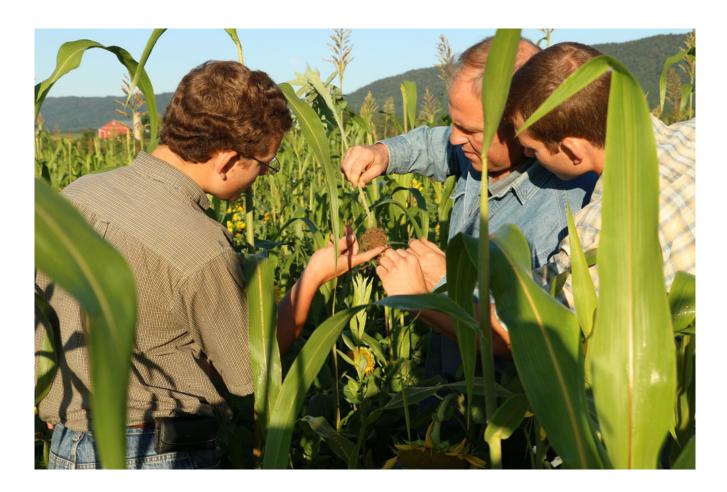
One day, I cut a bunch of brassicas (rape seed) for a salad. They looked so good!



The bees loved this new way of farming! There were blooming sunflowers, sun hemp and buckwheat and sorghum on 100s of acres and not a chemical in sight or smell. The other life species loved it too. I never saw so many barn swallows and butterflies, lady bugs and other beneficial insects!



We estimated close to 12,000 lbs. of biomass growing per acre. And 100% of that is going to be composted straight back into the soil. And that was just the part above ground. Soil scientists tell me that an equal amount of roots grows beneath the surface as the amount of plant that grows above the ground.



Winfred and Roland and I check out the root nodules of a sun hemp plant... Root nodules are the specific part of legume plants that fix atmospheric nitrogen in symbiotic relationship with rhizobia bacteria. God has an amazing process in place so that we don't need chemical nitrogen if we just follow his plan!



A close up of a few of the root nodules. If I squeeze them...



Sure enough... they are full of Natural Nitrogen, God-given plant food! It's as the song says, "Our Father's wondrous works we see, in the earth and sea and sky."



So finally the day comes that we work all of this organic biomass back into the soil. "Feeding the stomach of the earth," I like to call it. With the success we've had with our cover crops this year, we hope to do this every year. The organic matter percent of most of our soils right now is between 4 to 5%. With these cover cropping, soil regenerative methods used every year we hope to build that close to 8-9% organic matter.



## A week after working the biomass down

Just look at that thick layer of rotting compost and organic matter! You can almost hear the earthworms singing!

If we raise the organic matter 4 percentage points, that means that the water holding capacity of every acre will have increased by 60,000 gallons of water. (15,000 gallons of extra water holding capacity for every % of OM increase is a conservative figure).

60,000 gallons of water conserved annually over the 650 acres of land that we farm at The Family Cow is huge! 39 million gallons of water conserved!

So anyway, rejoice with us! I hope to tell you more about our

cover cropping, soil regeneration, carbon sequestering dreams in the future.

Your Farmer, Edwin

**NOTE:** I wrote this "giving back to the earth" farm story for our 2017 season. Since then, the boys and I have continued and expanded this practice. In fact, for our 2019 season, on some of our fields, we grew two "giving back" crops to every one crop that we harvested!