



PROFILES IN Soil Health

Dale Parker and Richard Hartman
Sedgwick, Colorado
350 dryland acres, 300 irrigated acres
Cattle and alfalfa
Covers: sorghum sudan, brassicas,
legumes, and grasses



A Journey in Leaving it Better for the Next Generation.

After having successful careers in the brewing industry, Dale Parker and Richard Hartman returned to the Parker family ranch near Sedgwick, Colorado in 1993. The property has been in Dale's family for 130 years.

Parker's portfolio includes conducting medical research at the John Hopkins and the University of Colorado Medical School. When asked why they left their careers with the brewing industry in order to return to the farm and ranch, Dale cited a lifestyle that allowed the couple to spend more time with their young children that was without the stressors of their current positions. "I always knew I wanted to come back to farm. Sometimes I don't know why.... But I don't regret it at all." Dale laughs.

Dale and Richard were inspired to implement soil



Root nodulation on legume cover crop.

health practices that would affect climate change and benefit carbon sequestration, as well as supporting their cattle.

"The climate is the big thing, and we're such a tiny piece of it. We can only do what we can do. We put up a lot of solar panels and try to cover our own electricity, and try to bring the soil back to health, but we're such a small drop in the ocean." Dale said.

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She added that assistance from the NRCS makes a lot of the farm's soil endeavors possible. "Luckily there are government programs to support it. CSP will help pay for this."

The couple farm dryland as well as irrigated, and have a cow-calf operation that ranges between 250 and 270 pairs.

Parker and Hartman have planted over four miles of windbreaks on their farm and ranch. After purchasing their first no-till drill in 2013 they converted completely to planting a cover crop grazing mix on their dryland acres.

"Our cover crop mix includes sorghum sudan, buckwheat nitro radish, purple top turnips, and peas. Last year the mix did really well, but that was because we had rain." Dale said. "We also put forage collards in the mix, which are pretty expensive, but I love forage collards because they'll last through the winter, and then they'll eat on it again in the spring." Which enables her to keep a living root in the ground nearly year round. The increasing droughts have the couple considering putting some of their ground into native grass as natives are better adapted to limited moisture.

Moisture levels and drought have been the biggest challenges with regards to their soil health practices on their dryland acres, but noxious weed pressure has also been an obstacle. The couple works to combat this by utilizing livestock to graze the young weeds in the spring.

Hartman and Parker have converted much of their irrigated ground to alfalfa and employ rotational grazing. "I take manure samples and lots of soil samples to and observe the nutritional balance and try and move the cattle when they need a supply of protein. The rotational grazing has been really good." Dale added the importance of various water supplies, to improve livestock distribution and limit erosion surrounding a single source. "Every pasture has two sources of water, which are absolutely essential."

Even though progress can be slow, especially on the dryland acres, Dale still notes the progress they've made since they started implementing soil health

Dale Parker and Richard Hartman- Colorado



Cattle grazing CRP for contract management.

After years of implementing cover crops and utilizing rotational grazing, "The soil is 100 times better than what it was 10 years ago when it was wheat fallow."

-Dale Parker

practices. "When we first moved back out here, when this field was still conventionally tilled, we had a three inch rain, and it took all the soil and just took it down the field. We ended up with some pretty good soil at the bottom of the field, but that was about it. It was pretty bad."

Rotational grazing, no-till, and grazing mixes that include a variety of species have made a big impact in their operation. Prior to engaging in these practices, the dryland portion of their operation was not producing sufficient income to meet the costs of labor, fuel, and other inputs. The return on these investments is long term. While the land has experienced droughts, higher functioning soil has better water holding capacity for what little water is available than conventionally tilled soil.

"It's also been easier in a way, because I'm not out here tilling and tilling and tilling." Parker remarked.

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"Economically we're better off in the long run now that we've employed these soil health practices."

-Dale Parker

Daniel Palic, Resource Team Lead, District Conservationist and Colorado's Area 2 Soil Health Coordinator, comments on the progress they've made. "A lot of good work's been done out here, we've done some infiltration studies and they've made progress with soil porosity."

Dale and Daniel also discussed the opportunity for further NRCS assistance, including EQIP. The ground is currently under a CSP contract and Parker and Hartman are interested in continuing that program or employing EQIP practices on it.

Dale and Richard have seen their neighbors beginning to try new things with regards to their practices. When asked why other's should explore soil health, Dale remarked on the configuration of the country's land use. "If you look at a map of the US, almost everything's agriculture, except of course the Rocky Mountain area and Appalachia, it's all agriculture or grazing. So if everybody started employing more soil health practices we might have more of a positive effect on the climate and better withstand periodic drought."

Dale Parker and Richard Hartman - Colorado



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