

Colorado Ranchers Use Valley Pivots to Improve Land and Increase Herd



Photos courtesy of Amber Thurow

- LOCATION:** Battle Creek Ranch
Near Parshall, CO
Elevation of 8,000+ feet
- SITUATION:**
 - High-altitude ranch with rocky soil
 - Approximately 550 mother cows, plus yearlings and bulls
 - 60% of land covered in sage
- CHALLENGE:**
 - Make better use of water and land
 - Maximize a short growing season
 - Reduce feed and fertilizer costs
 - Manage the effects of high altitudes on cattle
- DEPLOYMENT:**
 - Eliminate sage and develop flat land for grazing and crop development
 - Install Valley® pivots to keep sage at bay and irrigate hay and alfalfa
 - Graze cattle under pivots to fertilize land
- EFFECT:**
 - Quadrupling the amount of hay production
 - Doubling the herd over time
 - More efficient water usage
 - Improving fertility of the land
 - Saving on feed costs



Jeff Loving

Using irrigation properly isn't just an effective way to help plants grow. It can also serve as a way to prevent their growth.

Battle Creek Ranch sits at an elevation of about 8,000 feet, not too far from Parshall, Colorado, with the Williams Fork River running through it. Just about the only thing that grows well in the rocky soil at that elevation is sage – not the ideal crop for feeding a growing herd of cattle.

However, keeping the ground wet actually deters sage growth, making it possible to grow hay in those fields that are flat enough to develop for growing crops.

“The fields were at least 60 percent covered with sage before we put pivots on them,” says property/project manager Jeff Loving. “We brought in someone to plow off the sage and level out the land so we could develop them into hay fields. The pivots distribute the water perfectly, and the water keeps the sage away. It’s like a weed eater for us.”

The property’s water rights on the Williams Fork River date back more than a hundred years. Since the land is basically a high-altitude desert, water is extremely important on the ranch, which is why they began flood irrigation early on. However, there were no noticeable benefits on a large portion of the fields because the water went right through the rocky soil.

The manager of Battle Creek Ranch LLC, John Coors, doesn't like to waste resources, so he looked into putting pivots on the flatter areas to make better use of both the water and the land.



They installed two Valley pivots in the spring of 2010, three more in the next three consecutive years, five during 2018, and they plan to put in another two or three next year.

“We have one half-mile pivot, two full circles and the rest are half circles,” says Loving. “This year we’re putting in a full circle. Our dealer Steve Widhalm (of Valley Irrigation of Greeley) works one-on-one with Mr. Coors, who’s an engineer, to locate the pivot point in just the right spot.”

The ranch is about 200 miles away from the Valley Irrigation of Greeley service crew, so it takes an extra effort to keep things running well.

They pull water from the Williams Fork River to supply a large ditch, which supplies seven of the pivots. Two other pivots pull from a reservoir that is stream-fed.



Pictured L to R: Stephen Widhalm (Valley Irrigation of Greeley), Jeff Loving, Travis Wood, Krik Thurow and David Thurow

Saving on Feed and Fertilizer

The Valley pivots on Battle Creek Ranch don’t just keep the sage away. They also enable the ranch to grow hay for their cattle to graze on, as well as allowing for two cuttings of alfalfa during the short growing season. Since feed costs are higher in the mountains of Colorado than many places in the country, that’s a big advantage for the ranch.

“The pivot is a good method of irrigation,” says main ranch manager Krik Thurow. “It’s more efficient by a long shot than flood. We can irrigate four times as much using the same amount of water. Even though we will still need to buy hay, we also plan to stockpile some of our own hay for winter use to help cut feed costs.”

“We have two groups of cattle that graze in 10-acre paddocks for two to three days at a time,” explains Krik’s brother, ranch manager David Thurow. “We’re still experimenting with moving the cattle around right so we can get the grass back faster.”

Because of the short growing season, the ranch gets only two cuttings of alfalfa per year. The snows usually last until April or May, and start again in September. Even so, the managers of Battle Creek Ranch believe pivot irrigation will allow them to raise more cattle each year.

“Once we get our new pivots up and going, we can almost double the amount of cattle,” says Loving.

Krik agrees. “We could double eventually and hope to have 800 mother cows and yearlings.”

“Even with the short growing season, we quadruple hay production under pivots,” says David. “It makes our land a lot more valuable. Pivots are an investment, but it’s less expensive than purchasing more land to increase production. Land here is pretty pricey, so we have to manage it well.”

By allowing cattle to graze under the pivots, they are also putting nutrients back into the soil, which helps lower fertilizing costs.

“Pivot irrigation improved the ground, especially since we can have cattle on it and add nutrients to the land,” Loving says. “Valley Irrigation has played a key role in helping the ranch be successful in growing our hay crops for our cattle. Being able to grow a great hay crop in a very dry, arid area is critical for a successful ranching operation.”

You can see more about their registered high altitude angus breed on their website at highestaltitudeangus.com.